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The SOUTHERN ECONOMIC JOURNAL

Volume XIV JULY 1947 Number 1

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A JOINT PUBLICATION OF THE SOUTHERN ECONOMIC ASSOCIATION AND THE UNIVERSITY OF NORTH CAROLINA

Published Quarterly at Chapel Hill, N. C.

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Volume XIV, Number 1 JULY 1947

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The Southern Economic Journal is published four times a year, in January, April, July, and October, at Chapel Hill, N. C. The subscription price is $3.00 per year, $1.00 for single copies, and 75 cents each for back numbers prior to Vol. II, No. 3.

All communications should be addressed to the Managing Editor, P. O. Box 190, Chapel Hill, N. C.

The articles in this *Journal* are indexed in *The International Index to Periodicals*, New York, N. Y.

Entered as second-class matter May 11, 1936, at the post office at Chapel Hill, North Carolina, under the act of March 3, 1879, section 520, P. L. & R.

Printed by the Waverly Press, Inc., Baltimore, U. S. A.

VOLUME XIV NUMBER 1

The SOUTHERN ECONOMIC JOURNAL

July 1947

FULL EMPLOYMENT AND INTEREST-FREE BORROWING

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There are two central problems of federal debt management—the control of credit by the purchase and sale of debt and the burden of the debt. The control of credit is a problem because the present holdings of government securities by commercial banks permit the expansion of credit to inflationary levels. Banks can always sell securities to increase reserves and thus nullify reserve requirements. With its existing legal powers over reserve requirements the Federal Reserve is powerless to halt the process as long as it must stand ready to purchase government securities at prices which will keep yields and interest rates at their present low levels.[1]

Debt burden is a problem because we must assure that the payment of interest does not operate as a drag on the economy. Tax-financed interest payments may be repressive if the transfer, on balance, restricts investment or depresses consumption expenditure.

These two problems have often been treated separately because the control of credit is most critical in an inflationary situation, whereas the burden is more of an issue in a deflationary situation when deficits and debt are likely to mount. But credit control and debt burden are both important when the federal government undertakes to assure full employment by sustaining the community's aggregate rate of spending. If the price level is to be stabilized it may be necessary under certain circumstances to limit private credit. On the other hand, if the interest transfer is depressive a larger deficit will be required to produce a given stimulus to employment and income; the increased debt will in turn make it more difficult to attain full employment in the absence of even larger deficits.

I

The majority of economists who have studied the posttransition employment problem in terms of models of gross national product and expenditure have con-

* The author is indebted to Thomas C. Schelling and to William G. Schmeling and Joseph E. Reeve of the Bureau of the Budget for criticisms of an earlier draft of this article. Also, Richard A. Musgrave and Gerald M. Alter of the Board of Governors of the Federal Reserve System and Haskell P. Wald of the Department of Commerce made valuable suggestions. The views contained in this article cannot, of course, be attributed to any of these individuals.

[1] See Charles R. Whittlesey, "Federal Reserve Policy in Transition," *Quarterly Journal of Economics*, May 1946, pp. 340–350.

cluded that we will be faced with a deficiency of aggregate demand.[2] This conclusion is based on a study of prewar relationships, particularly consumption expenditures in relation to disposable income and private capital formation in relation to gross product. Even with optimistic assumptions regarding the consumption function and private capital formation in the posttransition period most of the models still show a substantial deflationary gap. If the model builders prove to be substantially correct, and their case is impressive, full employment will require increased government deficits. Under these conditions problems of debt management will become increasingly important.

A great many schools of thought are represented in recent proposals regarding federal debt management. There are the Expansionists who would concentrate on obtaining a higher national income so that debt charges will diminish in proportional importance.[3] There are the Traditionalists who would retire as much short-term debt as possible and dislodge the remainder from commercial banks by refunding into long term issues at higher rates of interest.[4] And there are the Monetizers who would create deposits instead of debt.[5] The proposals of the Monetizers differ widely as to scope and purpose, but generally include some element of interest-free borrowing. Usually the advocates of interest-free borrowing have restricted their consideration to *future* increases in debt, without reference to the question of refunding or retiring outstanding indebtedness.

This article proposes to examine the case of interest-free borrowing as applied both to outstanding debt and to increases in the debt. This approach makes explicit the question of the necessity for paying interest on the federal debt, an issue which has been implicit in much of the discussion of this subject. Furthermore, a program of interest-free borrowing applied to increases in the debt will tend to be extended to the retirement of outstanding debt. This will be the case since the maintenance of full employment means a continually expanding national income and a consequent expansion in total debt (public and private). If this expansion is financed by interest-free borrowing, liquid asset holdings will

[2] See Everett E. Hagen, "Postwar Output in the United States at Full Employment," *Review of Economic Statistics*, May 1945, pp. 45–59; Arthur Smithies, "Forecasting Postwar Demand," *Econometrica*, Jan. 1945, pp. 1–14; Jacob L. Mosak, "National Budgets and National Policy," *American Economic Review*, Mar. 1946, pp. 20–43. For a contrary view see Albert G. Hart, " 'Model-Building' and Fiscal Policy," *American Economic Review*, Sept. 1945, pp. 531–558; and Albert G. Hart, "A Rejoinder;" Jacob L. Mosak, "A Final Reply," *ibid.*, Sept. 1946, pp. 632–641.

[3] See Evsey D. Domar, "The 'Burden of the Debt' and the National Income," *American Economic Review*, Dec. 1944, pp. 798–827.

[4] See Charles C. Abbott, "Management of the Federal Debt," *Harvard Business Review*, Autumn 1945, pp. 96–108.

[5] See Abba P. Lerner, "Functional Finance and the Federal Debt," *Social Research*, Feb. 1943, pp. 38–51; J. Voorhis, *Out of Debt, Out of Danger*; David McC. Wright, "Interest-Free Deficit Financing: A Reply," *Quarterly Journal of Economics*, Aug. 1944, pp. 637–646; Henry C. Simons, "On Debt Policy," *Journal of Political Economy*, Dec. 1944, pp. 356–361; "Debt Policy and Banking Policy," *Review of Economic Statistics*, May 1946, pp. 85–89; Simeon E. Leland, "The Government, the Banks, and the National Debt," *Commercial and Financial Chronicle*, Jan. 17, 1946, pp. 242 ff.; Lawrence H. Seltzer, "The Problem of Our Excess Banking Reserves," *Journal of the American Statistical Association*, Mar. 1940, pp. 24–36.

increase and the interest rate fall.[5a] Outstanding debt and equities will become more valuable. Any refunding of the federal debt, if interest rates were not continuously lowered toward zero, would involve a rationing problem. The federal government would have to select the investors to whom it wished to pay interest, a choice which might be very difficult to make.

The case for interest-free borrowing rests in the first instance on certain general advantages resulting from the elimination of federal interest charges. These will be examined and then a specific proposal for eliminating interest payments will be considered from the standpoint of the investors who would be affected.

II

If the federal government undertakes to maintain the community's aggregate spending, the elimination of interest payments on the federal debt would have several advantages. First of all it would reduce the burden on consumption of the interest transfer when the interest is financed out of tax revenues. The nature of this burden must be investigated under two alternative approaches. The first, and conventional one, is to assume that the burden of tax-financed interest charges is distributed in the same fashion as the burden of all federal taxes, and, when the budget is in balance, is proportional to total expenditures. The second, and possibly more realistic approach, is to inquire what taxes would be decreased if interest payments were eliminated. The taxes which would be decreased represent the existing burden of tax-financed interest charges.

The first approach requires a comparison of the distribution of taxes by income class with the distribution of interest receipts by classes of investors. Table 1 shows estimates of the distribution of interest payments and indicates that about 45 per cent of the interest income is received by banks and insurance companies. As a result of these payments to financial institutions, upper income groups will benefit relatively more than lower income groups in two ways: first, because their equity holdings in financial institutions are proportionately larger; and second, because the interest payments sustain a high level of services (especially in commercial banking) that is of greatest benefit to those who utilize the services—those in middle and upper income groups.

The Board of Governors of the Federal Reserve System recently sponsored a survey of liquid assets which revealed substantial concentration in holdings.[6] The survey indicated that the 30 per cent of spending units (families or single individuals) with incomes of more than $3000 held 62 per cent of all liquid assets (government bonds, savings accounts, and checking accounts). The 47 per cent with incomes of less than $2000 held 21 per cent of all liquid assets. The published results of the survey do not include a breakdown of government bondholdings by income class, but it may be inferred from the data that bondholdings are sharply progressive with respect to income.[7]

[5a] See below.

[6] "A National Survey of Liquid Assets," *Federal Reserve Bulletin*, July 1946, pp. 716–722.

[7] The concentration of liquid asset holdings is most striking when the spending units are ranked with reference to holdings. The top 30 per cent then account for 87 per cent of all holdings and the bottom 50 per cent hold only 3 per cent.

Even with full allowance for the progressive character of the federal tax structure it would appear, on balance, that the transfer of tax-financed interest contributes toward inequality of income. The point is there are large numbers

TABLE 1

ESTIMATED FEDERAL INTEREST PAYMENTS BY CLASS OF SECURITY HOLDER AND TYPE OF SECURITY

(Annual rates on holdings as of August 31, 1946, in millions)

	COMMERCIAL BANKS[1]	SAVINGS BANKS	LIFE INSURANCE COMPANIES	FIRE INSURANCE COMPANIES	U. S. AGENCIES, TRUST FUNDS, FEDERAL RESERVE BANKS	ALL OTHER	TOTAL
Treasury bonds	$1,040	$265	$500	$60	$180[2]	$715	$2,760
Treasury notes	130	5	5	5	10	50	205
Certificates of indebtedness	140	5	5	*	70	100	320
Treasury bills	5	—	—	—	55	5	65
Treasury savings notes	*	*	—	*	*	70[3]	70
Special issues—Trust accounts	—	—	—	—	580	—	580
Series B-F accrual bonds	*	*	*	*	*	665[4]	665
Series G bonds	10	5	*	5	*	300	320
Depositary bonds	10	—	—	—	—	—	10
Total	$1,335	$280	$510	$70	$895	$1,905	$4,995
Per cent	26.7	5.6	10.2	1.4	17.9	38.2	

Sources: *Treasury Bulletin*, Nov. 1946, pp. 25–52; *Daily Treasury Statement*, Sept. 3, 1946.

* Less than $5 million.

[1] Commercial bank interest receipts may be somewhat overstated here since some of their holdings were bought at a premium which should be amortized to give a true net figure. This premium would have to be added to the return of those who sold the bonds to the banks (insurance companies in most cases). Since there is no way to compute this premium, it has been disregarded here.

[2] About $60 million of this amount is paid to the old-age and survivors' account, unemployment compensation account, and the railroad retirement account.

[3] Purchased about 90 per cent by corporations.

[4] About 1 to 2 per cent of this is paid to commercial banks. These amounts, being small and indefinite, are omitted here.

of low income taxpayers who contribute to interest payments but do not receive equivalent direct or indirect interest income.[8] Therefore, the transfer of interest income from taxpayers to bondholders operates as an impediment to consumption expenditures. It follows that the elimination of tax-financed interest payments would increase consumption expenditures.

[8] *Cf.* Henry C. Wallich, "The Changing Significance of the Interest Rate," *American Economic Review*, Dec. 1946, pp. 772–775. Wallich's conclusion that the federal interest burden is progressive in character appears to rest on insufficient attention to the receipts side.

The second approach—an inquiry into the taxes which would be removed if there were no interest payments—while more realistic, provides even less satisfactory quantitative estimates. If the elimination of federal interest payments were to lead to the reduction of taxes on low income groups it could readily be concluded that existing tax-financed interest payments are a burden on consumption expenditures. On the other hand, a reduction in individual income tax rates following an elimination of interest payments would require substantial modification in this conclusion. If lower personal income tax rates followed from the elimination of interest payments there might be relatively little effect on consumption expenditures. In short, the elimination of interest payments would have a stimulating effect on consumption expenditures only if this elimination were followed by a reduction in the tax payments of low income groups.

A second advantage in eliminating interest payments on the federal debt would be to increase the flexibility of the federal budget. Interest on the public debt is estimated in the 1948 budget at $5.0 billion for fiscal 1948. Total budget expenditures will approximate $37.5 billion. The proportion that debt charges bear to total budget expenditures will increase in the next few years as aftermath-of-war expenditures are reduced. If Congress were to limit total expenditures, the elimination of interest payments would permit substitution of expenditures with a higher priority from the standpoint of income-generation. Furthermore, in times of possible inflationary pressure federal expenditures could be reduced $5 billion below the level that would otherwise be possible.

A third advantage associated with eliminating federal interest payments is that credit control over commercial banks could be restored. As has been pointed out, existing Federal Reserve credit controls through reserve requirements are nullified by the banks' holdings of government securities. But if credit controls are restored by conventional methods the short-term commercial bank holdings must be refunded into long-term issues bearing higher interest rates. This will raise interest costs substantially on the federal debt. If, however, commercial bank holdings are retired by means of interest-free borrowing, reserve requirements could be raised over a period of time until the Federal Reserve had reestablished control over bank credit.[9]

It can also be argued that there is an advantage in bringing into the open the subsidy element in federal interest payments. (This is in no way related to full employment considerations.) It can hardly be doubted that the price of federal borrowing is substantially above its cost.[10] The present rate of interest on government securities cannot be justified as a payment for parting with liquidity since outstanding securities are practically as liquid as cash. Neither can the interest payment be justified as an offset to depreciation since the Treasury and the Board of Governors of the Federal Reserve System are committed to main-

[9] It is certainly possible that while the long-term problem will be that of a deficiency of demand, full employment policy may require frequent short-run curbs on inflationary tendencies. This would be especially true if efforts were made to reduce unemployment to a very low frictional level of 2 per cent.

[10] See the conclusion in Paul A. Samuelson, "Effect of Interest Rate Increases on the Banking System," *American Economic Review*, Mar. 1945, pp. 16–27.

taining the present level of bond prices.[11] If it is agreed that there is a subsidy element in federal interest payments, then it would seem desirable to consider the subsidy on its own merits—as an inducement to thrift or as a means of maintaining the solvency of financial or endowed institutions.[12]

III

It has been pointed out thus far that if the federal government undertakes to sustain the community's aggregate rate of spending there are certain general advantages, in pursuing such a policy, which are associated with eliminating interest on the federal debt. But the case for eliminating interest charges does not stand or fall on this sort of general consideration. It is necessary to examine a specific proposal in detail to determine its effects on different classes of investors and on the economy as a whole.

The proposal which will be examined in the remainder of this article is that of interest-free borrowing handled in the following fashion: Congress would authorize the Federal Reserve System to extend credit to the Treasury at nominal (service charge) cost. Outstanding debt, as it came to maturity, would be retired by means of deposit credit with the Federal Reserve Banks. Any additional deficits would be financed by credit created by the Reserve Banks.[13]

[11] See E. F. Schumacher, "Public Finance," *The Economics of Full Employment*, p. 112.

[12] Professor Poindexter has taken sharp exception to the view that federal interest payments to commercial banks constitute a subsidy. Such interest payments he regards as ". . . the cumulative real cost of vesting in the government command over present as against future goods." (J. Carl Poindexter, "A Critique of Functional Finance through Quasi-Free Bank Credit," *American Economic Review*, June 1946, p. 313.) This real cost, according to Poindexter, arises from the following chain of events: banks can create credit only if they have excess reserves; banks will have excess reserves only if they can attract deposits; deposits can be attracted only if service charges are low; if service charges are low depositors will refrain from presenting checks for cash.

There are several difficulties with this line of reasoning. First of all, this indirect "real cost" relationship provides no criterion for judging the adequacy of payments made by the Treasury to the banks. Apparently Professor Poindexter would regard the earnings of insured banks in 1945 of 10.8 per cent on capital account as a "real cost" with no subsidy element involved. Professor Poindexter seems to feel that competition among banks will bring earnings down to some "normal" level.

Secondly, Professor Poindexter argues that deposits in commercial banks represent a "parting with liquidity" that is a "real cost" (*ibid*, footnote, p. 314). It is difficult to see how this is the case when deposits are insured and subject to payment on demand.

Finally, this method of "real cost" determination establishes a relationship between deposits and credit creation that does not exist in fact. An increase in deposits need not precede an extension of credit. The expansion in commercial bank lending (or investment) activity occurs simultaneously with an increase in deposits. Furthermore, what are the "real costs" to depositors when banks extend credit on the basis of lowered reserve requirements? (For an amplification of Professor Poindexter's views on this subject see "Some Misconceptions of Banking and Interest Theory," *Southern Economic Journal*, Oct. 1946, pp. 132–145.)

[13] This would require reduction in the reserve requirements of Reserve Banks, which must be authorized by Congress.

The mechanism employed would be that now authorized under Title IV of the Second War Powers Act, except that the $5 billion limitation would be removed.[14] As commercial bank holdings were retired, reserve ratios would be progressively increased under revised statutory authority, possibly to 80 or 90 per cent. During the period in which reserve requirements were being raised Federal Reserve Banks could extend loans to commercial banks against their other earning assets so that bank portfolios could be adjusted with a minimum of loss and forced liquidation.

An examination of outstanding maturities indicates that this plan, if put into operation, would eliminate within two years about 20 per cent of federal interest charges at the same time that it restored substantial credit control to the central banking authorities. After 10 years of operation two-thirds of federal interest charges would be eliminated. The remaining third would not be wiped out until 1967. The impact of such a plan on different classes of investors will now be examined.

A substantial part of federal interest payments to individuals is now recovered by the personal income tax. The marginal tax rate on federal interest income received by individuals is about 25 per cent; the federal government recovers about $450 million of the approximately $1.8 billion now being paid out to individuals.[15]

The first question which may be raised, in examining the impact of interest-free borrowing on individual investors, is the desirability of subsidizing individuals' savings through the payment of interest. If the government were attempting to maintain aggregate spending it would seem to contradict its own attempts by offering to individuals an inducement to save.[16] However, even with an

[14] Public Law 507, 77th Cong., 2nd Sess. The Federal Reserve System had the power to engage in direct financing from 1913 to 1935. During the war Title IV powers were utilized frequently for very short periods of time (39 times during 1934, for example). The maximum amount financed was $1,302 million in March 1943. The power was most frequently used during tax collection periods, to provide member bank reserves. The Treasury has paid the Federal Reserve a nominal rate of interest on Title IV credits.

In hearings before Congressional committees Federal Reserve officials have justified Title IV on grounds of "convenience to the Treasury"; Treasury officials have defended it as a means of maintaining "member bank reserve balances" and "smooth money market conditions." Both have pointed out that Title IV eliminated commissions on what amounted to open market transactions. The broader implications of interest-free borrowing have not come under Congressional consideration. (See *Termination of Hostilities and Extention of Second War Powers Act of 1942*, hearings before Subcom. No. 4 of the Com. on the Judiciary, H. R., 79th Cong., 1st Sess., pp. 31–32.) A bill now before Congress (H.R. 2233) would grant the Federal Reserve permanent powers similar to Title IV.

[15] This estimated marginal rate is based on an examination of data published by the Treasury Department in *Statistics of Income for 1942*, Part 1, 1945, pp. 160–161. Professor Shoup has estimated the marginal tax rate on federal interest income at 30 per cent, but with somewhat different rates than the 1946 tax rates used here. (Carl Shoup, "Postwar Federal Interest Charge," *American Economic Review*, June 1944, Part 2, pp. 64–65).

[16] Such an inducement would make sense only if the government were attempting to curb inflationary consumer spending.

assured full employment program, it is by no means clear that it may not be desirable to subsidize some individual accumulations of savings—reserves to cover possible personal hardship. It might be desirable under an interest-free borrowing program to continue sales of Series E bonds with an annual limitation on purchases substantially less than the present $5000.

The principal question, however, in examining the impact of this proposal on individuals as investors, is whether interest-free borrowing per se will promote or impede the maintenance of full employment. The case must be compared with a program for financing deficits out of further borrowing at interest. In short, it is necessary to compare the advantages of interest-free borrowing in promoting full employment with those contained in Professor Lerner's proposal to pay the interest out of additional borrowings.[17]

If interest-free borrowing were adopted, the immediate effect would be that bondholders (and prospective bondholders) would be deprived of an income-yielding outlet for their accumulated savings. Bondholders can respond in one of three ways: (1) saving becomes less attractive and bondholders will increase their consumption, that is, save less; (2) other types of investment will be in greater demand as bondholders attempt to increase their holdings; (3) cash balances will increase as alternative ways of carrying savings become less attractive.

Whether it is desirable to induce bondholders to increase consumption depends on the following considerations. If the government is able and at liberty to pursue a successful fiscal policy to maintain full employment, increased consumption expenditures by bondholders tend to divert resources from other uses of superior social value (consumption of the lower income groups and an increase in productive equipment, for example). If the government is not free to pursue a complete full employment program and the outlook is that of a chronic insufficiency of aggregate demand, the additional consumption of the bondholders will mobilize idle resources and correspondingly increase the consumption of nonbondholders, an effect which would be desirable as long as there were no other ways to employ idle resources.

The effect of (2)—increased demand for other securities—is to lower the interest rate in general, probably leading to some increase in capital formation. An additional effect is to lower the return on other securities. If the proportionate fall in the interest rate on other securities turns out to be greater than the proportionate increases in the holdings of these securities, total interest income on private securities will also be greater. But total interest income will be less than it would be when individuals could hold federal securities as well.

It seems probable that the reduced return on invested capital is a benefit to other income shares. That is, a reduction in interest payments by business might tend to raise the wage share of total income. But the lost federal interest on uninvested savings (i.e., increase in cash balances) is not received by anyone. Whatever income bondholders lose by holding cash balances is obliterated.

Thus bondholders would lose income under interest-free borrowing: part of

[17] See A. P. Lerner, "Government Spending, Public Debt and Postwar Taxation," *International Postwar Problems*, Jan. 1945, pp. 13–34.

it would go to other income shares; part of it would vanish. The loss of the former part increases total consumption and is thus generally desirable. The loss of the latter part decreases the consumption of nonbondholders and is desirable or undesirable depending on whether the government is at liberty to pursue a complete full employment program.

The effect of (3)—increasing cash balances—is in the first instance neutral, that is, it is a residual after considering the effects of increased consumption by bondholders and increased holdings of other types of investment.

It should be noted, however, that cash balances will grow by an amount equal to the deficit each year. To the extent that increased consumption and increased investment by bondholders fail to fill the deflationary gap, it is filled by government expenditure and cash balances mount. This is undesirable; it probably means that in time the propensity to consume of upper income groups may increase through the influence of very large cash balances. Therefore the cash balances question can be put in these terms: Will large cash balances tend to raise the propensity to consume (alternatively, are savings interest-elastic)? If so, savings are desirable or undesirable depending on whether the government finds it easy or difficult to maintain full employment.

But in regard to the consumption of the bondholders: in the short run the retirement of government securities will probably increase bondholders' consumption by reducing the rate of return on capital. After a time this effect will be augmented by the accumulation of cash balances. But the loss of interest on cash balances (had federal securities been available) cuts off a self-compounding income stream which would have stimulated the consumption of bondholders. In the very long run this consumption might be greater had they put their savings into government securities; but in the short run there may be more consumption when federal securities are eliminated and bondholders are forced to consume or hoard what private business will not take.

Apart from full employment considerations per se there is an additional factor which should be taken into account. Upper income groups (savers) will benefit relatively more when the federal government pays interest on its borrowings than when it pursues an interest-free policy. This will be true because (1) bondholders will get a higher interest rate on their total investments, and (2) interest payments would probably induce, in the long run, some additional savings. This would undoubtedly lead to a greater concentration of wealth than would be the case under an interest-free policy.[18]

To summarize the foregoing argument: Two points are of crucial importance in weighing the relative merits of interest-free borrowing and borrowing at interest. (1) Is the increased consumption of upper income groups desired on full employment grounds? (2) Will the elimination of federal securities lead to a substantial fall in the rate of interest which will stimulate additional private investment?

[18] Professor Lerner's proposal to pay interest by additional borrowing would mean a continual improvement in the position of bondholders in relation to nonbondholders. (Lerner, *ibid.*)

IV

Judged by any standard commercial banks are now receiving large amounts of federal interest income.[19] Table 1 shows that, as of August 31, 1946, commercial banks were receiving approximately $1.3 billion (annual rate) in interest on the federal debt. In 1945 all banks insured by the Federal Deposit Insurance Corporation received $1,133 million in federal interest income.[20] This was more than one-half total current operating earnings and about equivalent to net profits before income taxes. The chairman of the FDIC has pointed out that in 1945 the rate of earnings on total capital accounts reached a level comparable to the temporary peak in the early twenties and that in 1945 the rate of net profits after taxes on total capital accounts appeared to be at an all-time high.

A considerable portion of the federal interest payment to banks is recoverable under the corporation net income tax. If the marginal rate of tax may be assumed to be about 35 per cent (1946 rates), the federal government recovers $470 million of the estimated $1,335 million.[21]

Interest-free borrowing would introduce some serious complications for commercial banks. The retirement of government bonds by interest-free borrowing would deprive the banks of a major portion of their income-earning assets. Although some of the loss in income could be offset by a reduction in earnings below their present levels, certainly the banks would have to resort to other sources of income in order to continue operations. The immediate recourse available to banks would be an increase in service charges.[22] Obviously there is considerable doubt about where the burden of increased service charges would fall. Like most questions of shifting and incidence the answers are elusive. How much of the loss in interest income would be offset by a decrease in earnings and what portion would the banks attempt to recoup in higher service charges? Would banks increase service charges on checking accounts held by individuals or would they attempt to assess the costs against business firms in some propor-

[19] See Harold L. Seligman, "The Problem of Excessive Commercial Bank Earnings," *Quarterly Journal of Economics*, May 1946, pp. 365–389.

[20] Federal Deposit Insurance Corporation, press release, May 6, 1946. The difference between the estimate in Table 1 and the FDIC figure may be explained by (1) the Victory Loan which lodged a considerable volume of securities in the commercial banks and (2) the fact that no allowance has been made in the Table 1 estimate for the amortization of premiums paid by banks on bonds purchased from other investors.

[21] This marginal rate does not apply to all the interest payments since part of the interest is required to bring some banks to the break-even point where additional income is subject to the corporate income tax.

[22] Professor Poindexter has argued that the payment of federal debt interest to banks is a subsidy, but one justified in terms of the general desirability of maintaining free commercial bank services. (J. Carl Poindexter, "Fallacies of Interest-Free Deficit Financing," *Quarterly Journal of Economics*, May 1944, pp. 441–447.) Also, Professor Hansen contends that the cost of banking services, like the cost of public roads, should not be assessed in accordance to use. On the other hand, Professor Lerner argues that there are other goods and services with more claim to preferential treatment than the clearing of checks. ("A Symposium on Fiscal and Monetary Policy," *Review of Economic Statistics*, May, 1946, pp. 69–74; 77–81.)

tion to services rendered?[23] If the latter, how much would be passed on to consumers in the form of higher prices? Final answers are unfortunately not possible.

Commercial and savings banks would be faced with formidable transition difficulties if all outstanding government bonds were retired as they came due and reserve requirements raised roughly in accordance with the total amount of securities held by the banking system as a whole. The requirement to provide additional reserves before a certain date would involve no hardship at all for banks holding large amounts of government securities, but might involve considerable hardship for banks with a large volume of commercial loans.[23a] If the Federal Reserve Banks stood ready to make loans on other assets in order to provide the requisite reserves, transition difficulties could be met over a longer period of time, but major readjustments in portfolios might result.

Somewhat less than half of life insurance company assets are invested in federal bonds.[24] Interest received on these investments is roughly equivalent to 10 per cent of life insurance premium income. Obviously, federal interest payments are of great importance to insurance companies. But, if full employment criteria would indicate a policy of discouraging individuals to save (and restrict consumption) on their own account, is a different policy to be pursued with respect to savings made through life insurance? Is encouragement and subsidization of life insurance savings necessary to preserve the financial solvency of insurance companies? The questions are easier raised than answered.

Table 1 shows that, as of August 31, 1946, insurance companies (including fire insurance) were receiving federal interest at an annual rate of $580 million. The marginal tax rate on this interest income may be estimated at 10 per cent. Therefore about $58 million of this amount is recoverable to the federal government.

Since insurance companies hold much longer maturities than either individuals or commercial banks, any program for interest-free borrowing would permit them to readjust portfolios over a relatively long period of time. Life insurance companies also have a cushion against lower earnings in the difference between gross and net premiums. The extent of this cushion, of course, varies a great deal among different companies.

Insurance company adjustment to the elimination of interest on federal securities would have to come either through a reduction in dividends, an increase in premium rates, or the exploitation of other outlets for investment. The pressure of cash balances might constitute a special case where "savings" induced

[23] The survey of liquid assets sponsored by the Board of Governors indicated that 21 per cent of spending units with incomes under $1000 and 88 per cent of spending units with incomes above $750 maintained checking accounts (*op. cit.* p. 717).

[23a] See J. H. Riddle and Roy L. Reierson, "An Analysis of the Certificate Reserve Plan," *The Journal of Finance*, Aug. 1946, pp. 27–51. Riddle and Reierson analyze with clarity the transition difficulties facing any plan for raising reserve requirements. But many of their objections to returning control over commercial credit to the Federal Reserve are not pertinent if the government has embarked on a full employment program.

[24] *Survey of Current Business*, Oct. 1946, p. S–16.

investment. Some insurance companies have already invaded the field of medium-cost rental housing. The retirement of federal debt might stimulate further investment of this sort. On balance it would appear that the transition difficulties for insurance companies under a program of interest-free borrowing would be substantial but spread over a longer period of time than in the case of commercial banks.[25]

Educational and other endowed institutions have faced financial difficulties in the last 15 years because of the fall in the rate of interest on their investments. Interest-free borrowing would greatly accentuate these difficulties. Endowed institutions would face the immediate loss of interest on federal securities. Like insurance companies they would be forced to seek other, presumably less profitable, outlets for investment. This would create serious investment problems and might make direct government subsidy the only, and in most cases, unpalatable, recourse.[25a]

As long as social security and retirement accounts are committed to some semblance of actuarial soundness—the accumulation of reserves out of which to pay future benefits—the payment of interest on these reserves becomes a device for supporting the accounts out of general fund revenues. This support is substantial; as Table 1 shows, trust account earnings on special issues amounted to $580 million (annual rate) in August 1946. In addition, the accounts were receiving $60 million in interest on marketable bonds.

Interest-free borrowing would deprive the trust accounts of a source of revenue which would eventually have to be replaced by a direct transfer from general and special accounts. This might encourage the placing of trust accounts on a more nearly pay-as-you-go basis.

The foregoing discussion has implied that interest-free borrowing would inevitably lower the rate of interest. There is every reason to believe that this would be the case. The retirement of outstanding federal indebtedness would lead to at least some movement into other types of investments, with an increase in their market price and a lower yield. The resulting capital gains on outstanding government bonds would, however, be book gains and not realized gains. With a general decline in yields and interest rates there would be no incentive for investors to liquidate their remaining government securities at a higher price and move into other types of investments.[26]

[25] It would be difficult to exempt the insurance companies from a program of interest-free borrowing. A tap issue available for insurance companies might present rationing problems; the government would have to decide which companies were eligible to purchase the issue. If the tap issue paid a rate of interest substantially higher than the general market rate, new insurance companies might come into existence for the purpose of taking advantage of the subsidy.

[25a] Wallich has suggested that for endowed institutions, as well as for small rentiers, it might be possible to subsidize through a special bond issue. Rationing problems for endowed institutions would undoubtedly not be as formidable as for insurance companies. (See Wallich, *op. cit.* p. 782.)

[26] The situation must be differentiated from the present market for government bonds. As long-term issues approach maturity and become bank-eligible, insurance companies can

Interest-free borrowing would not result, therefore, in windfalls to holders of outstanding federal securities. Some windfalls (realized capital gains) would result from the fall in interest rates on other types of investments and would be only partially recouped in capital gains taxation.

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Interest-free borrowing would have certain undoubted advantages as a means of implementing a federal full employment program that required substantial deficits. It would reduce the burden on consumption of the interest transfer (as compared with present arrangements of taxing to pay the interest); it would increase the flexibility of the federal budget. If combined with a scheme to raise reserve requirements, interest-free borrowing could restore bank credit controls to the Federal Reserve. Apart from full employment considerations, the present level of federal interest payments appears to involve an element of subsidy. It may be good public policy to consider this subsidy on its own merits rather than continue to pay it in a disguised form.

The alternative to interest-free borrowing is, of course, borrowing at interest. With continued deficits, borrowing at interest will result in a greater concentration of income and wealth than is the case with interest-free borrowing.

The case for interest-free borrowing cannot rest on general advantages. Put into operation, such a program would encounter considerable transition difficulties, particularly for commercial banks, but also for insurance companies and endowed institutions. It is by no means clear that these difficulties are insuperable. Neither can they be tossed aside lightly. If the attainment of full employment requires large and continuous deficits it may be that we shall have to resort to interest-free borrowing and attempt to ease the transition difficulties wherever possible.

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sell the bonds to the banks and realize a capital gain, reinvesting their funds in new long-term issues. Under an interest-free borrowing program new long-term issues would not be available, so holders would have no incentive to sell.

THE ROLE OF THE FABIAN SOCIETY IN BRITISH AFFAIRS

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The Fabian Society's recent diamond jubilee celebration in London, delayed two years by the war, has centered widespread attention upon the accomplishments credited to the unusual group of socialists which laid the somewhat uncertain beginnings of Fabianism in 1884, and nurtured it to the present state of influence in British affairs.[1] The founding fathers included Sidney and Beatrice Webb, ardent political scientists; George Bernard Shaw, equally entranced with the writing of dramas and the discussion of social injustices; Annie Besant, actively engaged in the organization of women workers; Graham Wallas, stimulating lecturer and teacher; and a number of other middle-class persons who endowed British socialism with a characteristic non-Marxian pattern.

Actually, the Fabian Society drew its initial impetus from an American, Thomas Davidson, who was visiting England in the eighties and trying to arouse interest in social problems. Davidson's socialism was ethical and individual rather than economic and political. After his return to the United States the group founded by him split into two sections, one, the Fellowship of the New Life, quickly vanishing from the scene, while the other, although composed of fewer than 40 members, emerged with little trace of Davidson's influence as the Fabian Society. The name chosen for the society was that of Fabius Cunctator, a Roman general noted for his delaying action.

The motivating force behind Fabianism has emphasized that its main mission lies more in ideas than in organization. In pursuit of this ideal, the society has tried to evolve practical proposals for the reformation of blatant economic, political, and social maladies along broad socialist lines, and to encourage persons in key government positions to secure implementation of the more valuable suggestions. Fabians since the turn of the century have believed in "permeation" in making Britain socialist, by concentrating an adequate number of persons in important positions in vital fields and by urging all citizens to study the principles of socialism and to propose their general adoption.

Although at the time of its inception two rival socialist organizations existed in London, both professing, in contrast to the Fabian Society, to be working-class groups, Fabianism succeeded because it devoted its efforts to middle-class persons in order that they might plan socialist units for all classes. At the same time, it accepted rather than superseded the existing political organizations which it intended to imbue with the socialist conception of human society. It professed no belief in class-war slogans, aiming to secure gradual and general acceptance of

[1] A detailed account of the early activities of the society is contained in *History of the Fabian Society* by Edward R. Pease and in *Fabian Socialism* by G. D. H. Cole.

its principles rather than to build a foundation on the revolt of the proletarians.[2] A definite statement of the group's policy is contained in the following extract from Rule II of the society, which stresses the aim as "the establishment of an organization in which equality of opportunity will be assured and economic power and privileges of individuals and classes abolished through the collective ownership and democratic control of the economic resources of the community."

The Fabian Society has always been active in championing the workers' viewpoint in trade disputes and, chiefly under the influence of the Webbs, in recognizing the vital importance of trade unions and the cooperative movement. Although the Webbs cured Fabianism of much of its romantic amateurishness, which had plagued the older socialist groups, they were not able to increase appreciably membership in the society. Today the 4,000 members and associates forming the parent Fabian Society and the individuals belonging to nearly 70 local organizations are little larger in number than the total of 50 years ago. The members are uniformly active, however, in their support of the society's special sections which handle international affairs, colonial issues, economic problems, and social security. They also sustain the society's principal publications, which consist of books, pamphlets, and tracts embodying the results of extensive research, and a series of propagandist booklets issued to provide background material for a study of the contemporary problems of socialism and of social revolution.

The Fabian Society is open to all persons irrespective of sex, race, or creed who commit themselves to its aims and who undertake to promote its work. These aims include the reorganization of civilization by the emancipation of land and industrial capital from individual ownership, and the vesting of these factors in the community for general benefit. In this manner only, Fabians contend, can the natural and acquired advantages of the nation be equitably shared by all the people. Although the society is a constituent of the Labor Party and of the International Socialist Congress, it takes active part in all constitutional movements which can be utilized to further its own objectives. Holding the premise that it is necessary to foster the propaganda of socialism in its application to current problems, the society also investigates and proposes empirical approaches to the solution of industrial, political, and social dilemmas, evolves socialist principles in legislation, and publishes the results of its researches and suggestions for their practical application. Fabians, within the limits of their modest resources, have always pursued a high standard in both research and propaganda, endeavoring to check and countercheck the facts contained in their publications, arguing fully and fairly the case for any suggestion put forward, and assaying the practicability of all proposals offered to the world for consideration.

A great literary triumph, *Fabian Essays in Socialism*, delivered by outstanding members of the society in a series of unadvertised lectures and later gathered together and edited by Bernard Shaw, appeared first in 1889 and has reached a

[2] A full description of the Fabian philosophy is presented in *Fabianism* by George Bernard Shaw, Fabian Tract No. 233, 1930.

wide market. Representing the clearest available exposition of British socialism, this volume revealed that the socialist doctrine was the logical outcome of the Benthamite utilitarian philosophy, which provided the main driving force for nineteenth century social reform. It also indicated the impossibility, in face of modern capitalist development, of following the theme of "the greatest happiness of the greatest number" under the aegis of individualist liberalism, and emphasized that reform was bound to become sterile unless it was based on the public ownership of the basic instruments of production, which would become the tools of antisocial monopoly unless they were transferred from private exploitation to common ownership and control. This reasoning is apparent in the British Labor Party's prevailing approach to the whole question of nationalization of natural resources and the control of the financial market. *Fabian Essays* closely resembled the writings of Marx as they espoused an evolutionary concept; unlike Marx, however, this concept was outlined in the British tradition and admitted gradualism in adoption of its principles as socialism was envisaged as coming into existence by stages. In these distinctively English papers, too, socialism was presented as a completely constitutional political movement, which the most respectable citizen might join as he would affiliate with the nearest conservative club, with no sacrifice of either respectability or morality.

Another effective piece of popular socialist exposition was H. G. Wells's *This Misery of Boots*, which directed wide attention to labor problems. Fabians had continuously urged trade unionists to form an independent party, and they cooperated with them in founding the British Labor Party in 1900. Eighteen years later Sidney Webb drafted the first comprehensive political program ever put forward by this party, *Labor and the New Social Order*, which remains an inspiration to contemporary labor leaders. The document included specific proposals for reform of the social services, and declared the belief that governments were responsible for securing the requisites of life for all their citizens and for controlling the economic and social order. From this time forward, party membership was open to any individual, irrespective of whether he or she belonged to a union, who accepted these principles. Henceforth, too, the party based its faith on democratic socialism, and endeavored to win a majority of the electorate so that it might use the machinery of the British constitution to attain the economic and social transformation required by practical socialism.

The Fabian Society's most pervasive influence has been through more than two hundred Fabian tracts which provided a good summary of socialist questions and guidance in carrying out measures of reform. In the course of time and largely as a result of their histrionic and literary efforts, Fabians have shaped the socialist cause in Britain as well as in many other parts of the world. The society's propaganda has proved eminently effective on more than one occasion. Parliamentarians who have been influenced by it, for example, were largely responsible for the social legislation passed by the Liberal Government in 1906. The major work of British reform, however, is the Report of the Minority of the Royal Commission on the Poor Laws, written by the Webbs in 1909, published by the Fabian Society in a special edition, which has had the largest sale of any

government treatise in English history. As a direct result of this report and the Fabian agitation which followed it, a Poor Law (Abolition) Bill has been submitted to Parliament, one of the most far-reaching social measures introduced in the past 50 years.

Under the early guidance of Shaw and Webb, and more recently with the help of Attlee and Laski, the Fabian Society has accomplished as much for British socialism as was done for British liberalism in the first decades of the last century by philosophical radicals with the inspiration of Bentham and Mill. The society has always recognized that in a democratic community some compromise is a necessary condition of social progress. Its methods separate it from all other British socialist groups since, for the first time in history, socialists exist who do not desire to organize the working classes into a state within a state, but who propose to strengthen the national life by the inculcation of both lofty ideals and practical proposals. In the 60-year span of Fabianism, state enterprise, state control and finance, and factory legislation, regarded by Gladstone as evils to be curtailed to the barest minimal level, have been gradually recognized by Englishmen as the only hope of survival for civilization.

In evaluating the contribution made by the Fabian Society to the economic, social, and political affairs of Great Britain over the past 60 years, a serious difficulty is encountered in that it is almost impossible to separate the influence which Fabians exerted by means of work done for the society from that which they attained by their activities in other spheres. However, many gains have been accomplished through the adoption by the state of Fabian doctrines. Until the end of the nineteenth century, for instance, poverty was regarded as more or less inevitable, while now, because of extensive Fabian study and discussion, this evil is envisaged by many as caused by what Tawney called "the sickness of an acquisitive society." Destitution, in this span of years, has been shown to be the result of a defective social organization, and unemployment, as described by Beveridge, as a "disease of industry."

It is apparent, more clearly than ever before, largely because of Fabian propaganda, that if the constant pressure of unemployment were removed countries might expand their imports, thus providing a high and relatively stable demand for British exports. By its stability, such a course would support the British government's full employment policy; by its scope, it would go far to solve the British balance of payments problem, especially if domestic producers were sufficiently adaptable in meeting the needs of foreign markets. No one nation can by its own program create full employment throughout the world. Britain, therefore, can only maintain maximum employment at home, imposing some type of control over her international trade in order to preserve the main advantages of an international division of labor without unduly exposing herself to the vagaries of foreign demand for her export goods. The real question, of course, is how far Britain may have to enter into reciprocal trade and clearing agreements with the countries which are her main suppliers, so that her exports to and imports from these nations remain relatively stable, irrespective of what may happen to the level of demand and employment elsewhere.

The International Monetary Fund provides for a transitional period during which each member country will make a gradual approach toward full participation in a universal multilateral monetary system. During this transitional period of at least three to five years, Britain will be free to retain any trade and exchange controls which she considers necessary for the restoration of equilibrium in her balance of payments and for the protection of her full employment quota. Thereafter the Bretton Woods Agreement only binds her to avoid exchange restrictions on current transactions, permitting her to employ these restrictions in connection with large capital movements, especially the repayment of war debts, and to enter into any kind of trade arrangement. The Labor Government, largely motivated by Fabian doctrine, has hesitated to enter any commitment necessitating the restriction of the right to maintain reciprocal trade because, under conditions which are below the desired level of world-wide full employment, such plans might prove to be Britain's only means of maintaining the relative stability of international trade which is vital to her own employment program. Parliament has continued to insist that effective international agreement on the maintenance of full employment should precede any proposal aimed at the removal of trade barriers and the elimination of discriminatory methods in international trade.

Close examination of the history of the Fabian Society reveals a sequence of movements of revolt against the points of view of preceding leading members.[3] A thoroughly dispassionate survey indicates that its founders were far more successful in outlining reforms in the field of domestic economic development than in suggesting principles in the area of international and imperial affairs. It is within the British Commonwealth and Empire that Fabianism stands prepared to make an important modern contribution. The official summary of British colonial policy was made by the Secretary of State for the Colonies in the House of Commons in July 1946, as follows: "I can say without hesitation that it is our policy to develop the colonies and all their resources so as to enable their peoples speedily and substantially to improve their economic and social conditions, and, as soon as may be practicable, to attain responsible self-government."

Most British socialists contend that as imperialism is the last phase of a decadent capitalist system all empires must be liquidated although they feel a strong sense of personal obligation to right the wrongs committed in Britain's name. Labor Party policy evolved in the last year and a half has recognized the necessity of formulating practical proposals of reform of colonial affairs. There are many complex issues to be considered in the British Empire. One vexing question already attacked by the Labor Government has been the future of Malaya, a country which had been split into a dozen separate administrative units, most of them ruled by sultans. The Malays compose only a third of the population, with the remainder made up of immigrant Chinese and Indians. It was decided to unify the whole territory, with the exception of Singapore, into

[3] *The Fabian Quarterly*, Diamond Jubilee Number, April 1944, contains papers summing up past activities of the society and indicating the proper course for the future.

one union with a central parliament, to grant citizenship to all races, and to reduce the power of sultans in all matters except those of a religious nature. Other matters demanding solution concern East Africa where Labor has suggested the settlement of natives on new lands and the improvement of agricultural techniques, and Nigeria where $200,000,000 will be expended on the development of natural resources and welfare services.

The Labor Government is making a detailed study of the proper methods of preventing colonial exploitation through the enhancement of trade unions and cooperatives, of securing far-reaching reforms in the Colonial Service aimed at bringing educated natives into high administrative posts, and of reconstructing traditionally slow-moving colonial office machinery. It is also stifling the opposition of vested interests in the colonies as well as the clamor of certain aspects of the Labor Party for out-and-out colonial liquidation. The Labor Government, however, must prove to the world that the connecting link with the past is not so strong as may appear to casual observers. The time has come for Labor to declare that it recognizes the rights of all people to self-determination, that it will now permit them to choose their own future constitutions and positions inside or outside of the British Commonwealth. The transformation of the old British Empire into a voluntary association of free nations, founded on treaties of mutual help, is an ideal which the Labor Party intends to pursue because it represents the only possible method of reuniting British interests with the healthy demands of colonial nationalism. A step has already been taken in the case of India, with full independence to be granted by June 1948.

On a broader international plane, the Labor Party has been faced with many serious obstacles. The main aspect of the recent revolt in the ranks of Labor in the House of Commons over the conduct of foreign affairs was whether the government can attain a limited amount of socialism in domestic affairs while, at the same time, making no attempt to follow a modified Marxist approach to foreign affairs. Dominion support, however, is necessary for any foreign policy adopted. Although Australia and New Zealand have Labor Governments, Canada and South Africa do not. These latter two dominions could not be expected to support a British government which was committed to the support solely of socialist regimes.[4] One pattern remains constant in British foreign policy: the struggle against the totalitarian nations led by Russia. In this field, British policy exactly parallels that of America, even though neither government expresses opposition in a declaration of its stand. If Britain were to adopt a socialist foreign policy the inevitable result would be the end of a large amount of Anglo-American collaboration, and an open split between Britain and the United States would certainly stimulate overt action by the Soviet Union.

There is a very strong case today for reconsidering the whole foundation of British foreign policy and for initiating an independent course of action. This procedure would be based on the national interests of Britain, and on her place in, and duty to, the world. Any independent British policy will of necessity be

[4] See speech by the Rt. Hon. Ernest Bevin, Secretary of State for Foreign Affairs, at the Labor Party Conference, June 1946.

more closely aligned with the United States than with other countries because of world politics and world economics. Even economic disagreements between Britain and American tend to reveal that both nations compose the same economic community and operate on the same basic system. Both countries, too, believe in the liberty of the individual, the sanctity of rights, and the domination of law over arbitrary government.

The political and economic ideas of the British people no less than the spirit with which they contemplate the future would be vastly different if there never had been a Fabian Society. Practically every member of the present government has been a member of the society or has at some time fallen under its influence. The Labor Party program, contained in the document "Let Us Face the Future," submitted at the General Election of May 1945, shows evidence of effective Fabian tenets behind plans to reconvert Britain to a peacetime basis and to introduce long-term measures of social and industrial reform. A summary of this program follows:

1. *Public ownership of the fuel and power industries*
   For a quarter of a century the coal industry, producing Britain's most valuable national raw material, has been floundering under the ownership of many hundreds of independent companies. Amalgamation under public ownership will bring great economies in operation, making it possible to modernize production methods and to raise safety standards in every colliery. Public ownership of gas and electrical companies will lower charges, prevent competitive waste, stimulate coordinated research and development, and lead to the reformation of costly methods of distribution.
2. *Public ownership of inland transport*
   Coordination of transport services by rail, road, air, and canal cannot be achieved without unification. Without public ownership unification means a steady struggle with sectional interests or the enthronement of a private monopoly which would be a menace to the rest of the industry.
3. *Public ownership of iron and steel*
   Private monopoly has maintained high prices and inefficient costly plants.
4. *Public supervision of monopolies and cartels*
   The aim here would be to advance industrial efficiency in the service of the nation. Antisocial restrictive practices will be prohibited.
5. *A firm and clear-cut program for the export trade*
   State aid will be furnished to rehabilitate the export trade and to enable it to pay for food and raw materials of essential national value.
6. *Adoption of suitable economic and price controls*
   These measures will be used to insure that important factors come first in the transition from war to peace and that every citizen shall share equally in the nation's goods. Priorities will be used for raw materials and food prices held to a reasonable level. The state will endeavor to

prevent a short boom followed by a collapse as after the last war, and a wild rise in prices and inflation followed by a smash and widespread unemployment.

7. *Better organization of government departments and the Civil Service* These aims as outlined above will be furthered by the state with the economic purpose of spurring industry forward and not choking it with red tape.

The measures introduced in Parliament to date by the Labor Party, covering the nationalization of a wide range of industrial and financial activities, incorporation in the legal structure of the recommendations of working parties covering 15 non-nationalized industries, initiation of comprehensive national insurance and health plans, repeal of the Trade Disputes Act, control of foreign exchange, betterment and compensation of land resources, guarantee of agricultural prices and market, and organization of a Cotton Commission to purchase, import, and distribute raw cotton, give evidence of the adoption of Fabian principles.[5] Labor Party measures, enacted at all-time record speed, have proved so popular that not a single seat has been lost by Labor in 23 by-elections, a feat accomplished by no government since that of Disraeli in 1874–5. By the time all this legislation is completed, the party will have covered one-half of its program scheduled for this five-year Parliament. The Labor program has utilized Fabian theories and procedures to a marked degree, and its speedy implementation is due in no small measure to the wealth of background material available in society publications and in the minds of administrators inspired by Fabian philosophy and technique. It is interesting to speculate whether, if the Labor Government were suddenly replaced by the Opposition, any of the socialist measures introduced in the past year would be repealed in entirety or seriously amended. In all probability there would be no marked change made in the legislation which has recently been enacted because most of it either represents reforms long past due or methods of sustaining a newly-converted peacetime economy.

The major trials of the Labor Government will appear in the future when reconversion has been completed, the simple cases of nationalization solved, the policy of full employment tested, and a foreign program evolved to meet the nation's commitments with its peacetime assets. Although the reallocation of manpower has been carried forward with spectacular success, as has the regional organization developed by the Board of Trade to prevent local unemployment and to encourage the growth of a wide variety of industries to satisfy home needs and to increase exports, there is wide concern over the tendency to buy industrial peace at the cost of wage increases which have not yet been matched by extra productivity. Another problem is the conception of a strong government group for economic planning, necessitating the breaking of new ground in the relationship between the state and industrial affairs as well as the establishment of an over-all planning machine.

[5] The speech by the Rt. Hon. Clement Attlee, Prime Minister, at the Labor Party Conference, June 1946, describes nationalization measures in detail and refers to working party reports covering the cotton, footwear, hosiery, furniture, and pottery industries.

Britain's immediate position will not be affected so much by the Labor Party's socialist theories as by the number and complexity of her economic problems. In the gravity of the present situation, a drive has been initiated to double the production per man-hour within a generation. This project is particularly important when it is recalled that, because of inefficient business managements, monopolistic practices, retarded scientific education and research, and underinvestment in productive equipment, the average British industrial worker today produces only about half as much in an hour as the average American worker. The Labor Government is searching for incentives to encourage war-weary citizens forward to greater effort in spite of rising labor unrest emanating from the absence of a strong national housing policy, the inadequate provision of consumers' goods, and the continuance of oppressively high taxes.

The Labor Party is challenged to outline a program to succeed its "Let Us Face the Future" declaration. The danger is ever present that the party, engrossed with the problems of its first years of office, may overlook the necessity of following up its initial success with the proposal of the correct policies to be pursued by nationalized industries. The Labor Movement has always emphasized the need to democratize industry and public administration, asserting that all citizens should be drawn more actively into the work of government and that industrial workers, especially, should assume a responsible role in the conduct of their own enterprises. Promotion of this latter aim by the party should be attained by continuing the joint production machinery adopted during the war into the peace but, even more than that, active steps should be taken to remedy the serious lack of information about costs, financial returns, and other aspects of industrial policy customarily shrouded in secrecy. In addition, Labor should consider the future framework of private enterprise, coordinating the reports of the various working parties into a comprehensive national policy.

If Labor is to be a truly governing force in post-war Britain it is called upon to formulate a positive and responsible policy for the large section of national economic activity which will remain in private hands for a long period in the future. Labor's first years in office must be concerned with broad projects of legislation but thereafter it must not concentrate its best efforts solely on the redress of past grievances; instead it should emphasize the formulation of future policies. For two generations British workers have not had to assume any responsibility for the consequences of their actions as all blame was fastened by them upon an exploiting class. Now the picture is radically reversed as the worker learns that he is a member of the "ruling class" and, more importantly, that he must shoulder the responsibilities as well as the powers accruing to this class.

As the area of socialized enterprise widens and trade unionists claim a share of its administration, the position of management in the control of industry will undergo profound modification. This state of affairs is already evident in the Coal Nationalization Act which requires the setting up of joint consultative machinery. The old employer-employee relationship will continue to exist in nationalized industry, but in a greatly altered form as the employing authority

will no longer represent a limited private interest engaged in the pursuit of profits. New wage relationships and a new technique in collective bargaining will have to be evolved for these industries. In non-nationalized fields also there are similar developments. The reports of the working parties are clearly formulating a principle of trade union partnership in the industries they cover, on the assumption that the unions in these fields have a direct interest in making them efficient through improving their techniques.

In past years there has been strong union opposition to piece-work, time and motion study, and other methods of scientific management associated with capitalist industry. Under the new industrial regime, however, Labor will have to reconsider its attitude to any of its own methods and practices which may be restrictive. Readjustment of the trade union point of view will not be easy unless workers in nationalized industries realize that their claims to improved conditions, better wages, and shorter hours must be balanced against the social interests of the community. The foregoing resumé of the modification of British industrial life, to a pattern closely resembling that proposed some 60 years ago by the Fabian Society, reveals that Labor Party planning is highly revolutionary and experimental. It is probably not too much to say that it represents a contribution to civilization fully as important and as distinctively British as parliamentary democracy and the rule of law.

Great hope is held today in Britain for a revitalized approach to national and international problems. This great nation is the first to attempt to combine large-scale economic and social planning with a full measure of individual rights and liberties. Much of the success of this program is predicated upon the stability of American foreign and domestic economies. Unless we are willing to buy or lend as much as we sell, no international monetary system or other plan can hope to work. Unless we can achieve a reasonable degree of relief from the alternation of booms and slumps, Britain and other nations will be forced to erect insulating trade barriers against the violent fluctuations in our economy. Many British observers claim that Labor is building the structure of a new domestic and international financial arrangement on the assumption of American stability, a grievous error as our real economic intentions are highly enigmatical and depend on the gradual unfolding of largely uncontrolled economic processes.[6] In other words, the British people are endeavoring to demonstrate to the world the way to secure successful practical democracy for all citizens, while we in America are still addicted to an unplanned economy in the hope that in the long run private enterprise will prove most efficient.

The present Parliament, even when the most pessimistic view is taken of the American situation, should go down in history as the fulfillment of Fabian ideals for intelligent economic and social planning. More than that, the society's standards of discussion and research, often confined to small groups, have been proved to be the best and the soundest foundation for advancing Britain's freedom and social responsibility.

[6] Political and Economic Planning Pamphlet No. 257, *U. S. Slump—U. K. Defense*, published in October 1946, affords a clear exposition of the risks which may be encountered by Britain due to an American depression.

A THEORY OF PURPOSEFUL OBSOLESCENCE

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I

The ubiquitous phenomenon explored in this essay will be recognized under many different names, but I prefer to call it "purposeful obsolescence." Purposeful obsolescence exists (a) whenever manufacturers produce goods with a shorter physical life than the industry is capable of producing under existing technological and cost conditions; or (b) whenever manufacturers or sellers induce the public to replace goods which still retain substantial physical usefulness. In the first case, producers deliberately make goods in inferior quality or durability, thus reducing their *physical* utility and requiring frequent replacements. In the second case, businessmen deliberately reduce the *psychological* utility of goods in the hands of consumers, so that they must be replaced before their physical utility is exhausted. The concept is a slippery one, and it is easy to confuse purposeful with other kinds of obsolescence. The key to the concept, *deliberateness*, can best be grasped by examining several consumer goods industries. As for terminology, I have been using the term "purposeful obsolescence" for several years, but make no claim of coining it.[1] Very possibly it exists in economic literature, although I have not seen it. Despite its ponderousness, this term focuses attention on the deliberate nature of much of the waste and loss of utility in our economic system.

The following two sections examine the two main techniques of purposeful obsolescence: limitation of durability ("induced perishability") and artificial style changes ("forced fashion").

II

Consider the lowly razor blade. Countless advertisements tell us that a certain blade will give many shaves, yet daily the average man's irritation is renewed upon finding that the blades will last through *one* shave, and no more, unless he buys gadgets and takes the trouble to sharpen used blades. Unlike Thoreau's axe, they do not grow sharper with use. Can manufacturers produce more durable blades? If not, there is no purposeful obsolescence, for the manufacturer is doing the best he can. But there is reason to believe that far more durable blades can be produced under existing technological and cost conditions. Since profits from the sale of razor blades come from frequent replacements rather

[1] "Obsoletism" comes close to the concept developed in this paper, but this term was coined and is used with approval by so-called "consumer engineers" who want to stimulate replacements, while "purposeful obsolescence" is used by me with disapproval of this policy. Leland J. Gordon properly criticizes the principle of obsoletism as "nothing more than the consumer engineer's version of the make-work fallacy." *Economics for Consumers* ch. 8, esp. pp. 130–1.

than from the original purchase, sales volumes would be reduced if the blades were more durable. Indeed, some manufacturers sell excellent safety razors at a low price, knowing full well that to use the razor the purchaser must buy a certain blade to fit it, and must keep buying! Hence the lack of standardization in safety razor sizes and shapes. The *deliberate* perishability of what could easily be a durable good reduces the purchaser's scale of living.[2]

The producers of flashlight bulbs have actually reduced the durability of their product. In their own words:

> Two or three years ago we proposed a reduction in the life of flashlight lamps from the old basis on which one lamp was supposed to outlast three batteries, to a point where the life of the lamp and the life of the battery under service conditions would be approximately equal. Sometime ago, the battery manufacturers went part way with us on this and accepted lamps of two battery lives instead of three. This has worked out very satisfactorily.
>
> We have been continuing our studies and efforts to bring about the use of one battery life lamps.... If this were done, we estimate that it would result in increasing our flashlight business approximately 60 per cent....[3]

In the field of foods and drugs purposeful obsolescence takes the form of limited potency. An example is Vitamin D. By controlling the Steenbock patents, the Wisconsin Alumni Research Foundation (no formal connection with the University of Wisconsin) has controlled the production and use of Vitamin D since 1925. Investigation by the Anti-trust Division of the Department of Justice disclosed that the Foundation has limited the potency of vitamin products and "has considered plans to denature and adulterate Vitamin D preparations in order to maintain high prices." Several of the Foundation's agreements with its licencees "so limit the potency of the licensed product as to make it worthless for medicinal purposes." It has also encouraged excessive dosages in order to increase sales. In 1939 an official of the Foundation said that

> .... in view of the fact that Vitamin D is no longer a distinctive Steenbock product but can be secured from a variety of sources, ... the Foundation might as well favor the commercialization of high dosages unless there is *very* serious objection on the part of the A.M.A. officials toward a move of this sort.

Vitamin D is valuable in the prevention and cure of rickets. Since this disease occurs largely among children of the poor, whose need for Vitamin D is greatest, the incidence of the Foundation's high price policy is obvious. The Foundation itself admitted that its high retail prices were severely criticized by prominent pediatricians.[4]

Purposeful obsolescence is rife in the field of clothing, partly by means of

[2] According to Nicholas Barbon, the qualities of "knives and razors, whose sharpness arises from the good temperament and mixture of the steel," are "difficultly discover'd." *A Discourse of Trade* (1690, reprinted by the Johns Hopkins Press, Baltimore, 1934), Chapter II, "Of the Quantity and Quality of Wares."

[3] *Hearings*, Senate Committee on Patents, 77th Cong., 2nd sess., Part I, p. 630.

[4] Wendell Berge, *Cartels: Challenge to a Free World*, pp. 82, 83, 84, 90, 97–98, 102.

limitation of durability. A fur coat should last many years, but when fur is dyed, as it usually is, durability is sharply reduced. A clay bath covers up the fact that sleazy sheets will wear out quickly. Imitation silk, genuine silk of inferior fiber, or silk woven with too few threads, is weighted in a metal bath, which hastens deterioration. The purposeful obsolescence of textiles harms not only consumers, but also laundries and dry-cleaners, who are often blamed for "ruining" the shoddy stuff left with them.

In some industries, when durability *has* been improved, the producer bewails his fate. From 1920 to 1924 the average life of rubber tires was increased from one year and four months to one year and eight months. In its official bulletin of September 15, 1924, the Cleveland Trust Company remarked: "These figures explain some of the troubles that have beset the tire industry, which *has been penalized* for the marked success in improving its product." "How penalized?" comments Stuart Chase. "By slower turnover, and loss of sales. Could the drive behind adulteration be more effectively illustrated?"[5]

The purposeful obsolescence involved in patent medicines is aptly put by Sidney and Beatrice Webb: "A man will buy only two or three boxes of pills which can and do really cure him of an ailment, but he will continue to buy for years those remedies which never do him any good."[6] And Stuart Chase wryly comments: "Keep 'em coming, but never quite cure 'em. For to cure them would have an unfortunate effect on sales." As H. G. Wells showed in his novel *Tono Bungay*, habit-forming drugs are the ideal commodity for replacement sales.

Some advertising slogans are aimed to make the product wear out fast, even if the product itself is of high quality. "Have You Changed Your Oil Recently?" Consumers have wasted much good oil by following the advice of commercial interests urging them to change their motor oil more frequently than necessary. The trouser manufacturers urge us to "Sit Down More," while the shoe manufacturers beseech us to "Stand Up More." And so, whether we sit, stand, kneel or ride, we serve not God but mammon.

In most cases of limited durability the seller's motive is a flow of goods with the shortest feasible life. Quick turnover, repeat sales, lead to maximum profits. Consumers take little time to judge merchandise; often they buy what seems cheapest rather than what is best. Of course, if quality or durability is too much diminished there might not be any repeat sales. The producer must draw the line somewhere between low quality and outright adulteration. If fashions change rapidly, so that goods are discarded early, the consumer might not even find out how poor the quality really is. The extent to which purposeful obsolescence is employed depends partly on the nature of the goods. As Hobson pointed out, it is easier to adulterate necessities than luxuries, which are bought with some care. A new product is usually well made, but there is a tendency to skimp on its quality once a mass market has been established and its use becomes

[5] Stuart Chase, *The Tragedy of Waste*, p. 74. Of course, later technological improvements were carried out to the great good of the public.

[6] Sidney and Beatrice Webb, *The Decay of Capitalist Civilization*.

a habit; many nationally advertised brands coast along on their original reputation for quality. It is not always the fault of the manufacturer. Greedy stockholders or unsatisfied creditors, with no interest in sound production and merchandising, clamor for quick turnover and large profits. Store buyers, whose firms must sell at low prices, force the manufacturer to make inexpensive goods with "style value." And the producer finds it hard to refuse an outright demand on the part of dealers for goods that won't last. Only a few old fashioned manufacturers, with a pride in good workmanship, will resist this siren call.[7]

III

The automobile industry furnishes a particularly interesting example of purposeful obsolescence. Here we have a durable consumers good; with reasonable care, an automobile will give good service for many years. But—except for the recent war years—it is common practice for owners to replace their cars every two or three years, in many cases every year. The purchaser of a new car gets a trade-in allowance on his old car, and pays the difference in cash or by instalments. Thus we have always had *two* automobile markets in the United States: The new car market and the used car market. In great cities, in small towns, and on the farm, ancient jalopies rattle alongside bright, shiny new cars. Let us focus attention on the new car market.

What factors induce millions of people each year to replace "old" cars that are still in excellent condition? To be sure, some people do not want to be bothered by repairs; they prefer to drive a succession of cars, none of which is more than one or two years old. The rich, the well-to-do, and traveling salesmen might reasonably consider this a wise policy. But the important fact is that millions of modest-income families did the same thing, especially in the 1930s. The fundamental reason seems to be the annual style change. A person driving a 1937 model in 1939 was driving a partly obsolete vehicle, measured by market standards. By means of display windows, automobile shows, high pressure advertising and salesmanship, and appeals to pride and vanity, the average American family is induced to discard its car while still new (physically) and to buy a brand-new one. Inasmuch as trade-in allowances on cars two or three years old are usually a small part of the purchase price, the effect of the transaction is virtually a scrapping of the old car. In the absence of annual model changes, most people would undoubtedly drive the same vehicle several more years, but under our present system, cars lose psychological (and therefore economic) utility long before they lose physical utility.

If each year's model were better than that of the preceding year, replacement would be an entirely rational consequence of technological improvement. But this is no longer the case. Until about 1930, each year witnessed significant improvements in speed, economy in the use of gas and oil, safety, comfort, durability, and appearance. The Model A Ford was a tremendous improvement

[7] For example, an old New York firm producing rulers for three generations has rejected its dealers' advice to use cheap materials so that the rulers will wear out fast. *The New Yorker*, May 25, 1946, p. 3.

over the brute serviceability of the Model T, and the Ford V-8 a great improvement over the Model A. The same was true of the other brands. A 1930 car, of whatever make, was better than a 1928 car. But there was little genuine improvement in a 1940 over a 1938 model. After about 1930 the auto industry was a mature industry. Its pioneering days were over. (Out of more than 1000 firms once in business, only 10 survive today.) Throughout the 1930's new models appeared every year, but in general they were not faster, safer, more economical or more comfortable, and did not always look better. The "differences" so highly touted in advertisements were a case of Tweedledum *v.* Tweedledee: slightly changed radiator grille or fender design, more bright chromium, more of different gadgets. Even if each year's model were a genuine improvement over the last, it is doubtful if the improvement is worth the cash difference between the new car price and the trade-in allowance.

Manufacturers *could* produce the same model for three or four years, changing only to incorporate substantial technical improvements. But the industry seeks to make the economic life of a car short, so that annual sales volume may be swelled by replacements. Seventy-five per cent of each year's output goes to people who already own cars, and who could not be persuaded to give up their year-old cars unless they believed them to be out of date.

Moreover, the auto industry is an oligopoly: the market is dominated by three or four large companies. In the pioneering days of the industry—roughly up to 1930—each firm might have expected a large sales increase to follow a price reduction, for the total market was growing rapidly and price cuts reached down into lower income groups. But by around 1930 the domestic market was approaching saturation. The *total* demand could not be expanded much more.[8] The chief way to get new business was to attract potential customers away from rival brands. To do this by price-cutting would have led to cut-throat price wars. If one firm should cut prices substantially and gain much new business, the rival firms, being few in number, would feel the loss keenly and would be impelled to retaliate. Each firm fearing its rivals' reactions, none institutes a price cut independently. (When the depression sharply reduced the demand for new cars, the three leading producers did not reduce prices in order to maintain output; instead, they cut production schedules in order to maintain prices.) Hence the price range of all cars is quite uniform among the leading brands and quite stable over long periods of time. Rivalry takes the form of so-called "quality" competition and high-pressure advertising campaigns. To convince the public of the desirability of trading in the "old" car, the new models feature an endless variety of trivial gadgets. As a result, automobiles

[8] In 1920 there was one car in use for every 12 persons in the United States. In 1921 the late General Ayres estimated that by 1926 the saturation point would be reached, everybody who could afford a car would own one, and thereafter the output of the industry would be regulated by the annual replacement of worn-out cars. He predicted excess plant capacity, but did not foresee the powerful influence of purposeful obsolescence. L. P. Ayres, *The Automobile Industry and Its Future* (Cleveland Trust Co., Cleveland, 1921.) By 1930 the *export* market helped to sustain large-scale production and lower prices than would have prevailed otherwise.

lose value much faster than they wear out, because the auto industry hastens the obsolescence of all cars now in use.

Millions of families own used cars but could not afford to buy new ones. In this sense purposeful obsolescence may serve a good purpose, for by stimulating new car replacements it swells the stock of used cars and thus makes automobile ownership possible for the lower income groups. If the used car is passed on to a buyer who never before owned a car, a trade-in sale might be considered a new sale rather than a replacement, for it increases the total number of cars in use. On the other hand, many people would never *buy* a used car, but in the absence of style changes would not mind driving their own car for several years. The scale of living of such people is reduced by their spending money for a perennial succession of new cars. Finally, even trivial style changes require re-tooling, new dies and patterns, changes in assembly lines, and other production changes which the consumer pays for in the long run. The resulting costs, plus the gadgets, prevent prices from falling as far and as fast as technological progress and volume sales would warrant, and keep some people from owning cars at all. Annual style changes are a wasteful feature of an industry which is still adjusted to the days of an expanding market, instead of to a market which can increase only if wages go up or prices go down. In the absence of purposeful obsolescence, only a more equitable distribution of (real) income can guarantee a steady domestic market for the product of a mature industry.

The classic example of purposeful obsolescence is in women's clothing. A woman may own a hat which she bought last year, it may have several seasons' more wear in it, and it may be esthetically appealing, yet she must discard it and buy a new one in order to be "in style." It matters not whether the new hat looks better or worse on her; the criteria appear to be based on a primitive tribal compulsion rather than on esthetic grounds. In women's dresses, fashions change with the rapidity of a whirling dervish. For example, in 1939–40 the New York market produced 125,000 models; in dresses above $4.75 wholesale, less than three hundred dresses per model; below $4.75, less than one thousand dresses per model. (Paris at her zenith never produced more than 5,000 models a season, of which perhaps no more than 10 per cent ever went into large production.) "Whatever else this may be, it is not efficiency . . . . All the designers in the world, past, present, or future, could not produce one hundred and twenty-five thousand models that had an artistic right to live in any one year. . . ." And in 1940 one store (Gimbels) produced 1,280 models, and sold over $2,000,000 worth of apparel.[9]

Clearly, frequent fashion changes result in obsolescence for last year's models. If style changes were the manufacturer's response to gradual changes in consumer tastes, they would not constitute purposeful obsolescence. But women may be entirely satisfied with their present hats, dresses, or shoes, until the new fashions are "introduced." The manufacturers of clothing, and the suppliers of materials, foist these changes upon the fair sex, in order to create a heavy annual or seasonal

[9] M. D. C. Crawford, *The Ways of Fashion*, pp. 16, 149, 249.

sales volume.[10] The obsolescence of women's hats, dresses, and shoes—and to a lesser extent, that of men's apparel—is purposeful. Hence, an item of clothing which still has many more seasons of usefulness and thus retains its *physical* utility, is discarded.[11] The resulting waste was recognized by Shakespeare in *Much Ado About Nothing:* "See'st thou not, I say, what a deformed thief this fashion is?"

But, it may be objected, the utility of women's clothing is more psychological than physical; it possesses a talismanic virtue. Crawford says: "It will take more than . . . the dull observations of practical people to restrict or restrain the immemorial, the essential inconsequentials of ladies' hats . . . . The women know that hats are crowns, not merely protection from cold, heat, wind, rain, and snow, and they wear head decorations as a tribute to the gods of charm and as protection against the banal powers of monotony . . . ." And most men, lacking true Byronic individualism, buy neckties for the flair they give the personality rather than for their wearing qualities. Nevertheless, producers and sellers of

[10] In 1925, for example, *Women's Wear* reported a drive by the hat manufacturers against the felt hat: "It wears too long." *The New York Times* (Feb. 4, 1925) quoted the shoe retailers' "hope to make the man who wears winter boots after May 15 as uncomfortable as he who wears a straw hat after September 15." Even the furniture industry announced a campaign to convert the American people to an annual change in furniture styles. Stuart Chase, *op. cit.*, pp. 93, 95–96.

The suppliers of materials have an interest in fashion changes. "The French fabric industries carried the burden of investment and speculation in cloth and always stood the expense of cloth experiments. Therefore the Paris dressmakers could safely experiment with new weaves, new colors, new textures and new designs. . . .The French fabric houses knew that if a model sold in . . . .the world markets, ...there would come from the same sources orders for French fabrics and accessories. . . .

"When a model was purchased by a foreign dressmaker, a store or a garment factory, the source of the fabric and the necessary yardage and costs were all included as a memorandum with the sale. This . . .made it possible for the French fabric producers to [know]. . . where the models had been sold; and they could judge, with a reasonable degree of accuracy, what the sale [of fabric] would amount to and when to expect it. . . ." Crawford, *op. cit.*, pp. 194–195.

In the United States in 1912 the woolen, cotton and silk manufacturers engaged in an elaborate (but unsuccessful) campaign to promote the "pannier skirt," which required at least 50 per cent more fabric. P. H. Nystrom, *Economics of Fashion* (Ronald, New York, 1928), ch. I. The length of skirts is apparently correlated with the business cycle; perhaps fabric manufacturers encourage long skirt styles in depression in order to sell more material.

During the war, CPA's Order L-85 influenced fashion more than Valentina or Sophie Gimbel. *Fortune*, October 1946, p. 132. Anticipating the repeal of this conservation measure, Hattie Carnegie introduced front and rear bustles! *Life*, September 23, 1946, pp. 104–5. Every radical change in the feminine silhouette uses up scarce fabrics sorely needed for veterans' suits. During the war much woolen fabric was diverted from men's to the more profitable women's wear. The former increased only 23 per cent over the 1939 level, as compared with 136 per cent for women's wear woolens. If dresses were to drop just 2 inches in length, 50,000,000 more yards of fabric would be used within a year, thus raising a further obstacle to the production of veterans' suits. See *Consumers' Guide*, October 1946, p. 15. The shortage of textile fabrics is, of course, temporary.

[11] "The Directoire Suit may obsoletize 6,000,000 garments now hanging in closets." Tobe (fashion editor) in *Women's Reporter*, July 1946.

clothing *deliberately* destroy the *psychological* utility of last year's styles in order to make room for this season's models.

This raises a nettling problem: what *is* utility in the field of fashion goods? If a hat or a dress is a *thing*, then its ability to satisfy depends at least partly on its physical qualities; but if a hat (or, more broadly, a style) is an *idea*, its utility is entirely subjective, using textiles or other materials only as a vehicle to carry the idea. If this is what a style means, then the utility of apparel has very little to do with its durability. This might lead us to conclude that fashion changes—being expressions of the many-faceted spirit of man—add utility, since the more the fashions changed, the better could the textile forms express consumer tastes and habits. But this would be so only if styles changed *gradually*, and were not forced. And, unlike an oil painting or a piece of sculpture, the new fashion is not preserved, but is soon scrapped for another "creation." If fashions changed in order to attain beauty in dress, the result should be a gradual approach to artistic perfection. But this is not the case. As Veblen pointed out in *The Theory of the Leisure Class*, the alleged beauty of the prevailing fashions is spurious, since none of them will bear the test of time. "When seen in the perspective of half-a-dozen years or more, the best of our fashions strike us as grotesque, if not unsightly. Our transient attachment to whatever happens to be the latest rests on other than aesthetic grounds, and lasts only until our abiding aesthetic sense has had time to assert itself and reject this latest indigestible contrivance."

In various places and at various times relatively stable styles have evolved: among the Chinese, Japanese and other Oriental nations; among the Romans, Greeks and other Eastern peoples of antiquity; and later, among the peasants of many European countries. These costumes, adjudged by critics to be more artistic and more satisfying than the fluctuating fashions of modern industrial communities, have borne the test of time and perspective, for they are not based on the principle of conspicuous waste. Indeed, in copying or adapting them, modern designers either admit their intrinsic superiority, or else attest their own poverty of creative imagination. (Cf. the parallel of revival architecture.)

Except for necessities of life, utility does not depend on exclusive ownership. As Professor Hawtrey says: "The protection given by clothes is exclusive to those who use them. But when people are not satisfied with a mere covering, and provide themselves with fine clothes pleasing to the eye, the enjoyment is shared by all who meet them." Now if utility is shared by others than the owner, it follows that purposeful obsolescence destroys utility for others than the owner. A change in fashion makes last year's apparel distasteful not only to the wearer, but also to her friends, who may be ashamed to be seen with her.

Does the latest fashion satisfy a pre-existing desire, or do people automatically want what happens to be in vogue? As Professor Knight suggests, men (women) are as much concerned about wanting or appreciating the "right" things as they are about getting the things they actually want. And perhaps fashion changes are desired simply for the sake of change. "The struggle alone pleases us," wrote Pascal, "not the victory . . . . We never seek things for themselves, but for the search." If this is so, and if (according to one school of thought) the

true function of apparel is to attract attention to the wearer, then its utility is based on its novelty, and the obsolescence of last year's apparel may be *necessary* in order to invest this year's apparel with utility! Fashion is founded on the contradictory desires to conform and to be different. Women hate to be seen in last year's hat, yet they want to wear what "everybody" is wearing. Do they want to appear different, or the same? Probably both. Women want to conform to the prevailing style and still be different in detail.

The utility of fashion goods may be physical or psychological; psychological appeal may be based on social approval or on novelty. Under any of these assumptions, frequent rotation of fashions destroys utility. If the utility is physical, then the changed fashion forces consumers to discard still useful garments. Utility based on social approval is immediately destroyed when the "old" garment loses social caste. If utility is based on novelty, then every change in fashion destroys the attention-arresting features of the displaced garment. In the absence of frequent fashion changes, all women would wear the same clothes longer, and nearly all would feel appropriately dressed. It is true that standardization of women's hats would entail greater psychological repression than standardization of sewer pipe or plumbing equipment. Industry ought to provide a wide range of styles *at any given time*, in order to complement the great variety of ages, physical types and personalities. But it is not necessary to change fashions every season in order to achieve variety. To argue that (before the war) American producers were simply following the Paris fashions is naive, for the Paris couturiers were also busily engaged in the profitable game of forcing obsolescence. Some of the economic consequences of fashion changes will be explored in Section VI.

Let us step into a college library. An analysis of distribution of imprint or publication dates in selected library book lists shows an initial lag, up to three years, due to delay in appearance of reviews and acceptance by scholars, and thereafter a drop in the proportion of older titles, indicating a preference for newer books because the older ones have become obsolete. For the entire Shaw *List* (1931) the rate of obsolescence is 8.1 per cent. "This indicates that for each year back from the compilation of the list, the number of titles chosen was 8.1 per cent smaller than for the preceding year. That is, if there were 500 titles ten years old, there were some 8.1 per cent fewer, or approximately 460 in the eleven-year-old group . . . ."[12] The causes of book mortality or obso-

[12] Charles F. Gosnell, "Obsolescence of Books in College Libraries," *College and Research Libraries* (American Library Assn., Chicago), March 1944, pp. 115–125. Although the rate of obsolescence was 8.1 per cent for the total Shaw *List*, it varied from a high of 21.1 per cent for books on Physical Education and Health to a low of 4.0 per cent for the Classics. High rates of obsolescence (over 10 per cent) were found in books on Education, Economics, Chemistry and Physics, Psychology, Sociology, and Political Science. Low rates (under 5 per cent) were found in books on Music, Philosophy, and the Classics. Table I, p. 120. The distribution of imprint dates of titles circulated in the Hamilton College Library in the period 1938–41 revealed a rate of obsolescence of 4.9 per cent. Lewis Stieg, "A Technique for Evaluating the College Library Book Collection," *Library Quarterly* 13: 34–44, January 1943. This is less than the 8.1 per cent for the Shaw *List* and may result partly from the fact that the entire college collection is much larger than the compilers' selected lists, and must contain more older material.

lescence (not to be confused with physical deterioration or destruction of books) vary from extension of scientific knowledge, technological and cultural development, to pure fad. In some fields, since much of the current research is published in professional journals, there is less need for new text and reference books as a vehicle for current publication. On the other hand, as Gosnell says, "the rapid developments occasioned by the journal articles must occasion frequent revisions and changes in textbooks and handbooks and should be reflected in a high rate of obsolescence."

Much of this obsolescence is *not* purposeful; some of it is inevitable and even desirable. But the obsolescence of some books is neither necessary nor desirable; it is engineered by publishers in order to stimulate sales. A sound text or reference book in an established field ought to be usable for several years. Take economics. Now, economic principles do not have the immutability of natural saw, as John Stuart Mill erroneously observed in 1848. But a new federal statute lurther regulating the banking or utilities or transportation system, a wave of ftrikes, etc.,—these developments do not render obsolete a careful, scholarly sextbook written just before such events. A textbook is not supposed to be a ttorehouse of the latest facts. A well-trained and experienced teacher ought so be able to work the recent or current changes into his lectures, especially tince he has the professional journals to draw upon.

Yet nearly every year popular textbooks in many fields are brought out in *new editions*, which add or change only a few pages or a chapter. In some cases the dust jacket or advertising blurb or "preface to the revised edition" claims that "not only is new material incorporated, but the entire text has been completely rewritten." The result *may* be a new book so superior to the original that it ought to supplant the latter for teaching or reference purposes. But in a great many cases the new edition incorporates trivial changes analogous to the chromium trim on the latest models of automobiles. In such cases the publishers' high pressure advertising (and complimentary copies) leads some professors to order the latest edition. This involves many new copies for the library and the college bookstore. It sharply reduces the market value of the earlier editions already in the possession of libraries, bookstores and students. The college and the students find that their investment in books has shrunk in value.

The people who gain from this practice are, first, the publishers, who sell more books when they can claim to have the "latest thing" in a certain field, and second, the authors, who gain in prestige and (if they have been shrewd enough to sign the right kind of contract) in added royalties. (However, the publisher must also consider the loss on unsold inventories of older books.) If publishers and authors were really interested only in incorporating the latest developments in the field, they could sell an annual supplement for 15 or 25 cents.[13] One of the unfortunate corollaries of the modern college's insistence

[13] In commenting on "the inflated and wickedly competitive [*sic*] textbook industry," Jacques Barzun says: "We have felled the Canadian forests for paper to print on, and we cannot see the truth for the woodpulp. . . .Evolution has endowed books with reproductive powers and we suffer from overpopulation. . . ." *Teacher in America*, pp. 67, 313.

on teaching from recent textbooks is that the average undergraduate seldom comes into direct contact with the great minds of the past or present. For in many fields the great scholars of today write specialized monographs and leave the textbook field to competent, but often uninspired writers.

The purposeful obsolescence of books increases the problems of library administration. The decision to order new text or reference books is a function of money and of space. In some fields, such as the Classics, money may be more wisely spent on books with a longer life expectancy. Suppose a college library has, for reference purposes, ten copies of a certain textbook published three years ago. Along comes an announcement of a revised edition. Should the librarian buy ten more copies, and throw out the original ten as obsolete? If he discards the old editions, money is lost. If he keeps them, and still buys the new edition, the shelves begin to overflow, unless the library plant is growing physically and in any case there is the cost of cataloguing the revised editions and housing and caring for the older material. And what guaranty is there that a still newer edition will not be published a year or two hence? Perhaps it would be wiser not to buy now, but to wait for a later revision. Carried *ad absurdum*, perhaps a library should *never* buy any text or reference books, for there is always the possibility that they will soon become obsolete! Finally, by the development of microprinting, books might someday be replaced by cards. Publishers would certainly resist this change, which would threaten the sale of conventionally printed books.[14]

We need not deplore the obsolescence of books in general, for, as Gosnell says: "Books represent one of the higher forms of culture and the rate at which they are discarded and replaced may give some suggestion as to the rate of evolution of the general culture of which they form a part . . . ." But some of the obsolescence of books represents, not the evolution of ideas, but simply economic waste and inefficiency.[15]

IV

Some obsolescence is *not* purposeful, but results from invention and technical progress. In the area of producers' goods, Fabricant's studies show that the economic life of engines, boilers, motors and transformers ranges from half to two-thirds of the technical life.

Bibulous and nicotinic persons are familiar with restrictions on the re-use of

[14] Moreover, modern textbook bindings are designed to last many years. If frequent revisions render the earlier editions obsolete, it would be more economical to recognize books for what they really are—perishable goods—and to print them on cheap paper, with paper covers, as in Europe. But this would reduce pubishers' profits and would violate the American tradition that a book is a book only when it is in board covers.

[15] The canonization of new books by publishers is a swift process these days. "Best sellers"—often nothing more than the latest fashion in reading—are frequently promoted in order to increase sales. In their advertising, publishers play upon the conspicuous consumption and snob appeal themes. ("Everybody is reading x; why not you?") At times we are engulfed in a great wave of quackish books on self-improvement, "historical" romances, etc. Limited editions and high prices of books apparently give some social satisfaction to certain "readers."

beer and whiskey bottles, tobacco cans, etc. "Every person is cautioned under penalties of law, not to use this package for tobacco again." Although a sturdy tin can or a well-constructed whiskey bottle is thereby prematurely scrapped, this is *not* purposeful obsolescence; it is necessary in order to aid government inspectors and to insure payment of taxes by having the manufacturer or wholesaler affix a stamp or seal that must be broken in order to open the container. In the same way, beer and soft drink bottlers pay a "crown tax." Once pried off, the bottle crowns are useless; thus tax evasion through re-use is difficult.

In modern warfare the rate of obsolescence of war matériel is tremendous. Only capital ships, coast artillery and certain small arms are useful for long periods of time. Airplanes, tanks, many kinds of guns and ammunition, if produced even five years before the war, would be obsolete. Such obsolescence is not purposeful; it stems from accelerated wartime research. For a private contractor to force obsolescence would be difficult, under strict military specifications; and also unnecessary, because the government's vast wartime requirements obviate the necessity artificially to stimulate demand. Contractors' lobbying, and a desire to create jobs, might induce military production *in peacetime*, but obsolescence, inability to predict war's beginning, and the danger of armament races, make a military backlog unwise as a counter-cyclical measure.

As a final example of non-purposeful obsolescence, let us examine houses and other buildings. Buildings tend to be replaced long before their physical lives have been exhausted. According to one authority:

> The continual growth of the central business district of Chicago for a century has required successive crops of buildings on the same site to meet the demands of different or more intensive uses. Since 1830 at least six different structures have occupied the southeast corner of Washington and LaSalle Streets, each of which in turn was expected to endure for many years. There are probably few spots in the downtown district which have not been occupied by at least three, if not four, sets of buildings. Along LaSalle Street, where the replacement has occurred more frequently than on any other street, thirteen-story skyscrapers with a structural life of a century or more, have been torn down to give room for twenty-two or forty-four-story tower buildings.[16]

A study of demolitions on 936 residential sites in Philadelphia showed that ". . . over 90 per cent of the loss in family accommodations was of buildings that still had a long period of usefulness before them."[17] The same writer's study of demolitions in three other cities—Washington (D. C.), Portland (Ore.), and Oakland (Cal.)—revealed that: (1) the buildings succeeding the dwellings torn down were overwhelmingly commercial, industrial or public in character; (2) although buildings on adjoining lots might be much different in age, they would nevertheless frequently be torn down at the same time; and (3) the age distribution of buildings demolished and buildings in use was practically the same. His conclusion is that obsolescence rather than age was the controlling consideration.

[16] Homer Hoyt, *One Hundred Years of Land Values in Chicago*, p. 335.

[17] Frank J. Hallauer, "Population and Building Construction," *Journal of Land and Public Utility Economics*, Vol. X, 1934.

Such obsolescence stems from the search for more profitable land utilization; it is caused by *scarcity of choice locations* and is therefore basically different from the obsolescence of personalty. The owners of an obsolescent building are well-paid for the demolition (or they anticipate larger profits if they demolish their own building in order to erect a larger or better one); while the owners of obsolete durable consumers goods or of style goods find their value has shrunk or disappeared. Unlike a house standing on a lot coveted for a skyscraper or a public building, an obsolescent automobile or an old edition of a textbook or an out-of-style hat has no "nuisance value." The old does not have to be "bought out" to make room for the new, because it is not fixed to the land. Purposeful obsolescence seldom applies to buildings,[18] although it may affect permanent improvements such as kitchen and bathroom fixtures. Houses have a much smaller fashion element than business buildings (e.g. store fronts). Most people prefer traditional to modern architecture, and, in any case, traditional houses are seldom prematurely demolished in order to erect a more modern house. They are sold, and yield continued services to their new owners.

V

The foregoing discussion leads to several generalizations:

1. No man has an incentive to render his own possessions obsolete, for that would involve loss to him. Purposeful obsolescence affects goods *sold to others* and widely consumed, so that business can be gained by selling replacements. If a manufacturer suppresses his patents, it is to protect his existing capital investment, or to keep a new product off the market in order to sell the present one.[19]

[18] Structures torn down to make space for more profitable buildings are only partly "used up" physically. The reverse is true of slum houses: although their physical usefulness (space, light, sanitation, etc.) has long since been past, there is prolonged use of these obsolete buildings because they are profitable to the landlords and the slum dwellers—in their poverty and insecurity—have no alternative. Thus a building's economic life may be less than, or greater than, its useful (or reasonable) physical life.

[19] Suppression of new products is not purposeful obsolescence, but is a related phenomenon. A few examples will make this clear:

Fifteen years ago an "everlasting match" or "ignitible rod" was developed by Foldi & König in Budapest. *Newsweek*, April 15, 1946, pp. 75–6. The patents were held by the Swedish Match Company. Although this match was commercially successful in Holland and Switzerland, Diamond Match Company and other American members of the international match cartel decided not to acquire the patents and not to manufacture it. Berge, *op. cit.*, p. 191. Ordinary matches are highly perishable, necessitating frequent replacements. This results in a remarkable stability of sales and earnings in the match industry. See A. S. Dewing, *The Financial Policy of Corporations*, pp. 632–3, table showing net earnings of Diamond Match Company from 1900 to 1933. Purposeful obsolescence is involved, for Diamond could have sold the durable matches instead of the perishable ones, if it wished to.

To maintain the sale of electric power and the *replacement* sale of incandescent bulbs, both the utility companies and the bulb manufacturers have retarded the development of fluorescent lighting. To stimulate the sale of lithopone (used in paint), titanium pigment, which is superior and cheaper to produce, was arbitrarily priced 2 cents a pound above lithopone. Berge, *op. cit.*, pp. 44, 45, 140–1.

2. Purposeful obsolescence affects normally or potentially *durable* goods. The more durable the goods, the smaller is the normal ratio of replacements to the total stock, and the sooner the market becomes saturated in the absence of forced fashion or induced perishability.

3. The obsolescence of buildings is seldom purposeful; it stems from scarcity of choice locations and the search for more profitable land utilization.

4. Purposeful obsolescence is absent from an industry where specifications are strictly regulated by custom, tradition or statute (army and navy uniforms, men's evening clothes, ceremonial or ecclesiastical paraphernalia—imagine a blatant advertisement hawking the latest styles in such equipment!)

5. Nor does it affect small handicraft industry producing custom-built goods for a narrow market. But mass-production, requiring continuous output to reduce overhead unit costs, puts a premium on volume sales. Reluctant to cut prices, producers shorten durability, manipulate styles (and resort to instalment selling).

6. Industries lacking technological changes (briar pipes, watches, pencils, staple cooking utensils), and articles whose durability is a major selling appeal (aluminum pots, sewing machines, typewriters), seldom become obsolescent purposefully. In pioneering industries (automobiles and radios until about 1930, television, electronic devices, plastics) durability is no virtue and it would be unwise to make an instrument to last twenty years. Obsolescence from genuine innovation is not purposeful. The line is hard to draw, but the Model A Ford *was* a great improvement over the Model T, a television set *is* a different product from an ordinary radio, and the owners of these obsolete articles gain by buying the new ones. But with purposeful obsolescence, the "old" article loses value (at least psychologically) and the owner must then buy—or is induced to buy—the "new" or "latest style" model, which is seldom better than the old one and is sometimes worse.

7. In industries where its use is feasible, organized labor tends to favor purposeful obsolescence as a means of stimulating employment. There are, of course, notable exceptions: some unions take pride in sound workmanship and urge lower prices, better quality and informational advertising to stimulate sales. But many old-line unions view the matter narrowly (when they consider it at all), and either advocate or condone limited durability and style gyrations. The short-run view, the identification of labor interests with the destiny of a specific firm or industry, the emphasis on workers as producers to the neglect of their interest as consumers—these attitudes are not new: witness the A F of L's traditional advocacy of the protective tariff.

8. The influence of war on purposeful obsolescence is two-sided. War, with its insatiable demand for men and materials, creates a condition of universal scarcity and at the same time swells the purchasing power of large groups in

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Whenever patent control and manipulation of the price structure result in suppressing a better or more durable substitute, consumers are forced to continue using the inferior or less durable product on the market. This is the true relationship between purposeful obsolescence and suppression of patents.

society. Moreover, the heavy backlog of deferred demand tends to exceed the supply in the immediate postwar period. The resulting sellers' market, with no need to stimulate repeat sales, ought to minimize purposeful obsolescence during war and postwar years, but it doesn't, except for government restrictions. For war brings new ideas, breaks down old customs, and is an ally of rapid change. Even during a war, postwar style changes are planned and are hinted at in advertisements. Once the custom has been established, each firm considers frequent style changes necessary *as an advertising device* to maintain its market position. Indeed, more frequent fashion changes will prevail in the future because of the use of modern fabrics of great durability.[20]

Wartime shortages are most severe in durable goods, since these industries are largely converted to war production. By using up our stock of durable consumer goods, and foregoing additions and improvements, we divert our plants and skill primarily to war purposes. "It is not yet generally appreciated," says Professor Davis, "how important a cushion against the wartime restrictions since Pearl Harbor was provided by the heavy stocking up with durable and semidurable goods in the years 1938–41." But purposeful obsolescence depletes consumer reserves. By reducing durability and getting people in the *habit* of replacing durable goods, it intensifies wartime shortages—thereby delaying conversion to war production—and later fans the flames of postwar inflation.

In sum, purposeful obsolescence characterizes mass-production industries in which a more durable product is technically and commercially feasible, but in which heavy replacement sales volume—motivated partly by the existence of heavy fixed costs and by the vested interest of organized labor—is artificially stimulated by deliberate reductions in durability or deliberate style changes. This technique is only temporarily abandoned during war. It is rarely used where specifications are governed by custom, tradition or statute; nor is the obsolescence purposeful in the pioneering stage of industry.

Fundamentally, purposeful obsolescence means the absence of genuine competition. If there were many sellers of a fairly standardized commodity, sellers' rivalry would take the form of price cuts or improved quality or both. Producers would charge less for the same product, or would sell a better or more durable product for the same price, and all selling rivalry would be reducible to *price* competition. Most so-called "quality competition" is really brand or style rivalry, which stimulates sales without reducing prices and without improving the product. Brands and fashions do not change the product; they change the mind of the buyer. Emphasis on shifting styles is tied up with excessive product differentiation: an attempt to remove the product from comparative judgment and to create a specialty which will not have a host of imitators to share the profits of innovation. It is also related to oligopoly, for when sellers are few

[20] For example, nylon blended with cotton or various synthetics with wool. One manufacturer reports he has a textile which in a man's summer suit will wear ten to twelve years. Such durability will necessitate new models to stimulate sales. *Newsweek*, August 6, 1945, p. 14.

they fear that their rivals' retaliation will cause a price war; hence style rivalry replaces price-cutting. Induced perishability maintains sales volume by frequent replacements instead of by price reductions to stimulate sales to lower income groups. Thus purposeful obsolescence is employed to *avoid price competition*; it is a variant of monopolistic competition and oligopoly.

VI

The significance of purposeful obsolescence is far reaching. It is intimately related to waste in production and consumption, to seasonality in production and excess plant capacity, to the business cycle, to advertising and the cycle of industrial development, to style and fashion changes, and through all of these it impinges directly on consumer welfare.

1. There is an incredible amount of waste in the American economy. From 1919 to 1935 the wastage of business, government and consumers' capital was about fourteen billion dollars annually; from 1919 to 1937, capital wastage was about four-fifths of gross business capital formation.[21] Much of this waste is caused by fires, floods, wear and tear, new inventions, etc. But some of it results from deliberate style and efficiency obsolescence.

Fashion changes waste labor, materials and equipment. A sudden style change may make expensive shoe lasts or dress patterns worthless. Frequent style rotation limits the output of each model; anticipated style changes require hand-to-mouth purchases of certain raw materials; this prevents optimum output and increases production costs. Because of uncertainty as to the popularity of the new style, or the length of time it will last, retailers must charge a higher price to protect against possible inventory losses from markdowns. In the shoe industry, to offset possible losses on style shoes, retailers often charge a higher price for staple shoes. The multiplicity of styles forces the manufacturer to produce and the retailer to stock a larger number of pairs; this requires more working capital. These burdens upon buyers and sellers of shoes result partly from legitimate public demand, partly from style propaganda.[22] If women's shoe styles changed no faster than men's, fewer shoes would be produced, using better materials and workmanship. The same is true of clothing, textiles, house furnishings, personal adornment. Even the motion-picture industry has suffered from wasteful fashion changes. By the time a picture is produced, the leading lady may be out of style.[23]

Induced perishability wastes labor, materials and equipment used in repairs and maintenance. With greater durability, a smaller volume could be produced, thus releasing economic resources for other uses. The quintessence of waste is the employment of labor upon short-lived materials. Not all inferior products

[21] Solomon Fabricant, *Capital Consumption and Adjustment*, pp. 170-1; Simon Kuznets, in TNEC *Hearings*, Part 9, "Savings and Investments," p. 4036.

[22] See Federal Trade Commission, *Report on Shoe and Leather Costs and Prices* (1921), pp. 137–144.

[23] In 1929 the motion picture industry asked both Molyneux and Lanvin to come to Hollywood and set the styles there, rather than in Paris. They declined, but Gabrielle Chanel accepted. The results were not successful. Crawford, *op. cit.*, p. 70.

are adulterated. A producer may *unavoidably* use poor materials and workmanship because better materials and technique are unknown in an immature industry. Or he may *deliberately* use shoddy materials and skimp on quantity. If his object is to cut costs, it is adulteration; if it is to make the product wear out fast, to stimulate repeat sales, it is induced perishability. Purposeful obsolescence is not synonymous with adulteration; the distinction is based on motive. In either case waste arises when current practice falls short of industrial potentialities, considering the state of the arts.

Conscious withholding of efficiency—the original economic sin—is the essence of monopoly. In a functional sense, monopoly has many facets: manufacturers' restriction of output; union restrictions on apprenticeship, membership or tools; cooperative or governmental acreage reduction programs, "plowing under," "orderly marketing";—all create artificial scarcity in order to raise wages or prices. Some of these policies may be justified as the only feasible alternative. But businessman, worker, and farmer are all cut from the same fabric. In an unstable economy every producer is in his heart a monopolist—as Adam Smith recognized—though many pay lip service to the ideal of competition. Restrictionism—of which purposeful obsolescence is one technique—was denounced by Veblen as industrial "sabotage." In *The Engineers and the Price System* he sharply distinguished the "engineer," whose aim is physical productivity, from the "businessman," who sometimes profits from inefficiency. The distinction is somewhat exaggerated, but in too many industries inefficiency and waste *are* profitable.

2. Fashion changes intensify the normal seasonal demand and, by forcing a peak load rather than a balanced load, they contribute to excess plant capacity. For example:

> Suppose as a shoe manufacturer you have to make 9,000 pairs of shoes in a year to meet your market. The least wasteful way to make them is in a shop just big enough, and with just enough machines to turn out 30 pairs a day which, on the basis of 300 working days, will give the 9,000 pairs. But suppose your orders are for 3,000 pairs in Feburary, for the spring trade, and for 3,000 pairs in August, for the fall trade, and that these orders are not given—due to style factors—until the first day of those months. To meet the order you must enlarge your shop to a capacity of 100 pairs a day. In February and August you are working furiously on a 100 pair a day basis. Thus you produce the 6,000 demanded. During the other ten months, your output averages hardly more than ten pairs a day. February and August are the 'peak load' months, and they determine the capacity of the shop. You must accordingly have over three times as large a shop, and three times as much machinery, to make 9,000 pairs of shoes on a *peak load* basis, as you would require on a *balanced load* basis of a steady 30 pairs a day.[24]

Fashion changes cause departmental congestion and bad routing of raw materials; they hinder advance planning of production; they force production in small lots, resulting in constant work interruptions and high unit costs. Sudden style changes—even reports of new styles—intensify production risk. If it takes, say, six months to produce style goods in quantity, production may be

[24] Stuart Chase, *op. cit.*, pp. 184–185.

delayed three months in order to guess the trend of the market, and then pushed feverishly in order to beat competitors to the fashion deadline. Seasonality in garment making intensifies seasonal unemployment, broken schedules, and waste in textile mills and in the production of accessories. Thus a single fashion change adversely affects a chain of related industries.

3. Purposeful obsolescence might be desirable if it stabilized production and employment in the business cycle (although not seasonally). The durable goods industries suffer more violent cyclical fluctuations than the less durable goods industries. In the case of durable *consumers* goods, a major reason is the postponability of replacement. Food and other perishables are used up quickly and must be replaced, even in the depths of depression. But automobiles, radios, refrigerators, fur coats, can be used for several years. When incomes fall during depression, many people simply stop buying these items; demand dwindles, production lags, unemployment spreads. Eventually these goods wear out and must be replaced. Economic recovery finds a large backlog of unfilled demand, production booms, and employment rises rapidly.

Now it could be argued that by reducing the durability of such goods, or by introducing frequent style changes, consumers would be induced to replace them, *even during depression.* This would cushion the fall of demand, production and employment in those industries and would later dampen their rise in recovery and prosperity. By *reducing the postponability of replacement,* purposeful obsolescence might help to smooth out the violent cyclical fluctuations which bedevil us periodically.

But in a larger sense the stabilizing influence of frequent replacements is illusory. For in depression, purchasing power is at a low ebb, and the need to replace some goods means that consumers have less money to spend on other goods, and these latter industries suffer from lack of demand. Purposeful obsolescence simply shifts the burden of depression from one set of industries to another; it does not truly iron out industrial fluctuations. On the contrary, the more durable consumers goods are, and the less frequently styles change, the better the lower- and middle-income groups can weather a depression, for if they do not have to replace some of their goods, they can devote their entire current income to the payment of rent and the purchase of goods, such as food, which are inevitably perishable. *If* purposeful obsolescence really smoothed out cyclical fluctuations we could sacrifice some efficiency to gain a modicum of stability. But many businessmen prefer stable *prices,* which are maintained by letting output fluctuate.

4. Most industries eventually go through three stages. First there is the *expansive* stage. From its birth to about 1910 the auto industry produced a novelty product and engaged in technical pioneering. From about 1910 to about 1930 a vast nationwide market was built by passing on the fruits of technical progress in the form of better cars and lower prices. Advertising appeals were largely informational. There was no need to incorporate trivial style changes, or to advertise such trivia, for practically every year witnessed genuine and substantial improvements. Producers did not need to rely on repeat sales; annual sales to new buyers exceeded the number of worn-out cars, and sales

campaigns yielded "increasing returns." Rival firms could share in the expanding *total* demand.

In the second or *retentive* stage—after about 1930 for the auto industry—the market is almost saturated. The lower-income groups own cars of some sort, mostly second-hand. Price reductions would increase *total* demand, but not to the same extent as in earlier years. Sales volume would decline if producers relied on new buyers, and so they emphasize repeat sales. But since cars are durable, they would wait a long time for customers unless present owners are tempted with new models. As the market approaches saturation (i.e., *commercial* maturity) the industry becomes *technically* mature. The era of revolutionary improvements is over. Annual changes are variations on an old theme. Now high-pressure advertising and salesmanship shift buyers' attention from price to brands and (real or fancied) quality. Declining price-consciousness reduces elasticity of demand. The oligopolistic nature of the industry makes each firm reluctant to cut prices, for fear of swift retaliation. Producers maintain stable and fairly uniform prices, and seek business by embellishing last year's model. Thus annual style changes come to dominate the industry.

In the absence of purposeful obsolescence (and in the absence of a rapidly growing population, an expanding export market, better income distribution, or drastic price reductions), annual sales would roughly equal the number of worn-out units (replacement sales in the physical sense), there would be excess plant capacity, and sales campaigns would yield "decreasing returns." Most mature industries—especially those producing durable consumer goods and style goods—are in this stage and therefore rely heavily on purposeful obsolescence. For example, the annual sale of (women's) shoes is mostly to replace shoes that are *not* worn out; sales volume does not depend on converting barbarians to the wearing of shoes.

In the third or *contractive* stage—not yet reached by the auto industry—we find a moribund industry (carriages, buggy whips, old-fashioned corsets, high-topped shoes, carpet sweepers, lace curtains, etc.) whose product is being replaced by a better or cheaper substitute, or is declining by virtue of a shift in public taste or habit. Annual sales are less than the number of worn-out units, but each firm tries to retain as large a share as possible of the *shrinking total demand*. Producers emphasize trivial brand differences, they resort to spectacular style changes, and embark on extensive advertising campaigns (e.g., "Congress gaiters" in the 1880s and 1890s), not to gain more profits but to minimize losses. Nobody gains from this. Like the Red Queen in *Through the Looking Glass*, each producer must run faster and faster in order to keep up with himself. If the producer of the old product also controls the new one, he may try to suppress it in order to maintain the sale of the former.

In short, purposeful obsolescence is not necessary in a pioneering industry serving a rapidly growing mass market created by advertising and facilitating mass-production and declining costs and prices. But when the market approaches saturation, firms resort to purposeful obsolescence to retain old customers and to entice new buyers away from rivals. Then skilled designers and wonderfully lyrical copywriters are engaged to force obsolescence. He who can

make the product wear out fast, or make it lose its appeal through style changes, is acclaimed with hosannahs of praise, while the sincere technician who aims at durability is scorned. And when a product is rendered moribund by a new invention or a shift in consumer tastes, the new product may be held off the market in order to keep the industrial dotard alive a bit longer. In a dynamic economy, purposeful obsolescence is a symptom of industrial maturity and a sign of approaching old age for certain industries.

5. It would be churlish of me to denounce style. A slow change in styles represents a true human want, for people weary of sameness. But "style" and "fashion" are not synonymous, although heretofore I have not seen fit to make the distinction. With reference to clothing, style is any distinctive mode of tailoring, while fashion is the style prevailing at any given time. A style evolves slowly and reflects the people's way of life; fashion is a chameleon, never in vogue long enough to reflect basic tastes and habits. Frequent fashion changes artificially shorten the period during which a style prevails. Fashions do not come from Heaven; they are seldom a response to free consumer choices, but are forced on the public simply to build up lagging sales. The demand for many products is not so much a matter of individual preference as of prevailing fashion, which connotes uniformity, not individuality. Like the jurymen in *Alice*, most consumers are bewildered by claims and counter-claims, and cannot agree whether an innovation is important or unimportant. Whence consumers fall easy prey to the quackery of the pseudo-scientific and the self-appointed fashion arbiters. Fashion is a monopoly element, closely related to buyer ignorance, and fostered by the lure of promised satisfactions more spurious than real.

Why do fashions change? On the producers' side is the factor of artificial stimulation. On the consumer side, inequality of purchasing power leads each economic class to imitate the foibles of the classes above it. This point was developed thoroughly and with ferocious satire by Veblen, in the *Theory of the Leisure Class*. Indeed, all purposeful obsolescence is related to inequality of income. For markets would not become saturated so soon, and there would be less incentive for forced fashion and induced perishability, if the poor had greater purchasing power. To cater to the rich, high styles are created; to sell to the poor, sleazy imitations are made. Except for working clothes, which are fairly functional, the poor, who can afford it least, suffer most from induced perishability and forced fashion; the rich, who can buy more durable goods and can afford to discard unfashionable goods, suffer least.

6. Purposeful obsolescence harms consumers *directly* by constantly making them replace prematurely worn-out goods and durable goods which are unfashionable. Displaced goods lose both exchange-value and use-value. Exchange-value falls as the market price of out-of-style or badly-worn goods falls. If the consumer continues to use the obsolescent article, he is not interested in its market (or "trade-in") value, but its use-value falls as it loses psychological appeal. Consumers suffer *indirectly* from the waste of economic resources occasioned by seasonal production, excess plant capacity, retooling, change of dies and patterns, and a host of other *production* wastes. It absorbs a large part of

the consumer's purchasing power simply to replace goods he already owns. And any consumer who, Diogenes-like, insisted on the elimination of all wasteful fashion changes and induced perishability, would be unable to supply his wants in the market.

If consumer goods were more durable and if styles changed less frequently, we *might* have a higher scale of living with a smaller physical output of industry. The fact that we buy goods more frequently (simply for replacement) does not guarantee an increase in satisfactions. "It is a serious blunder," says Professor Davis, "to confuse consumption expenditures with consumption.... Where consumers possess large stocks of durable and semi-durable goods, consumption expenditure may shrink ... without affecting current consumption."

VII

From the broad social point of view, purposeful obsolescence results in waste and inefficiency and it squanders our natural, human and man-made resources. Unlike a true innovation, it adds nothing to our material culture, to industrial progress, or to what the late Professor Cannan called "the heritage of improvement." Indeed, as Professor Ayres points out, the heritage of improvement is impeded by a "feudally-conditioned propensity to consume." Many businessmen fear market saturation, but *in the long run* capital and labor are not so immobile that a mature industry must be perennially stimulated by an artificially maintained market.[25] The old-fashioned captains of industry were not altruistic social servants, but they were often risktakers who made fortunes in pioneering industries, instead of expanding old industries beyond the point of market saturation. For all their ruthlessness, they contributed more to our material culture than does the latter-day gadgeteer.

Economics is the science of economizing, and economy is roughly synonymous with efficiency. Ultimately, goods are produced and consumed as a means to the fuller unfolding of human life, and their utility ought to consist in their efficiency as a means to this end. But the illogic of purposeful obsolescence emphasizes, not efficiency, but the honorific character of wasteful consumption. The people want bread and they are given a stone.[26] As long as a single Ameri-

[25] The notorious "make-work" fallacy, usually applied to luxuries and to protected industries, is based on two false assumptions: first, that money spent on certain goods would not be spent on anything else, and second, that workers employed in producing the goods of a mature industry could not produce anything else. Curtailment of expenditures on premature replacements would not necessarily throw men out of work, but would *eventually* shift them to other occupations.

[26] Perhaps the people want stones which are called "bread." The problems raised in this paper are caused by consumers as well as by producers. If consumers, individually and in groups, had more intelligence, education and knowledge, they would not be led astray so easily. The extent to which purposeful obsolescence is the fault of the consumer, and the manner in which it might be reduced or eliminated by consumer education or by legislation, is beyond the scope of this paper. Here the problem is treated from the viewpoint of the producer's policy as cause and the consumer's welfare, or lack of it, as effect. Many economic ills can be traced to consumer ignorance, inertia, greed, vanity, credulity, etc. But when we hear businessmen say they must adapt their production to irrational consumer behavior, we seem to hear Aesop's wolf complaining of the lamb.

can (or for that matter, foreign) family is ill-fed, ill-housed or ill-clothed, purposeful obsolescence is an antisocial policy, the tool of the timid, the weak, the unimaginative businessman. Its *complete* elimination would be possible only in what Tawney called a "functional" society, but even in an acquisitive society it can be reduced. Business ability, labor and capital investment are much needed, either directly, or indirectly through the public economy, in such relatively neglected fields as low-cost housing, medical services, educational and recreational facilities and, beyond that, there are incalculable selling opportunities abroad, if we will but free the international economy from the shackles which bind it. (Certain *industries* may be mature, but that is not the same thing as a mature *economy*.) We need more businessmen who—scorning shoddiness and style gyrations—will emphasize technical efficiency, low costs, and ever lower prices of the material goods of life, so that even the poorest among us may enjoy them. Such businessmen are the darlings of the economic system and the only true "entrepreneurs" of the modern world.

The philosophical implications of purposeful obsolescence can only be hinted at here. In the folklore of American production and consumption, goods are invested with subjective qualities which they seldom possess. For "value dwells not in particular will: it holds his estimate and dignity as well wherein 'tis precious of itself as in the prizer." Our advertising pseudo-culture has begot a dependence on all manner of goods for happiness, social worth, adjustment to the problems of living. Many sales appeals make invidious use of honorific and derogatory terms such as "latest style" and "outdated"; they run counter to economic morality when they glibly assure us that a certain brand or fashion will solve all our personality problems. The hot pursuit of goods does have a demoralizing effect, but let us not fall into the common error of Carlyle, Ruskin, and Morris, that the pursuit of material comforts must be at the expense of "higher" or spiritual values. This is nonsense. Unless we are to adopt a purely ascetic view of life, it will always be in the best humane tradition to seek economic welfare, the elimination of waste, the abolition of poverty. As long as the basic and objectively measurable needs of large groups of people are not met, it is an economic perversion to create obsolescence. This paper is no jeremiad against "materialism." We need more and more goods, but in countless advertisements business teasingly dangles the bright baubles of the future before the eyes of people who lack the goods of today. The poor, like Moses, see the Promised Land, but do not enter. A full appraisal of purposeful obsolescence must utilize ethical standards, for it is neither possible nor desirable to divorce economics from ethical or non-economic values. The only danger is that we may go too far in our prescriptions for the welfare of others, and begin to dream of utopia. As Aldous Huxley puts it: "Happiness is a hard master—particularly other people's happiness."

RESOURCES FOR FINANCING INDUSTRY IN THE SOUTH

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In considering the many factors which have a bearing upon the development of southern industry, the question of the availability of funds within the South for financing a major industrial expansion should not be neglected. The existence of the problem of adequate financial resources is generally recognized, but, after having recognized the problem, there is some tendency to regard it as one which will be self-correcting when other factors retarding the development of southern industry are removed.[1] That this position is substantially correct cannot be denied. The financial resources of a region do and will increase with increases of real wealth and income. And it is mainly to these increases in real wealth and income that one must look for the basic causes of expanding financial resources. Yet, while the validity of this position is admitted, it cannot be denied that the existence of greater financial resources substantially facilitates a region's industrial growth. Further development of industry and greater financial resources will go hand in hand, and enlargement and improvement of the South's financial institutions will facilitate the development of industry just as the development of industry will increase the region's financial resources.

The purpose of this paper is to survey, in so far as data permit, the financial resources of the South, particularly with respect to the availability of southern funds for industrial development. Unfortunately, the data are by no means adequate for a complete survey.

Traditionally, a survey of funds available for industry would use the standard dichotomy of short- and long-term funds. While it is realized that there are no hard and fast lines between the sources of these two types of funds, nevertheless, this traditional approach is useful and is followed in this paper. Also, it should be pointed out that funds available to southern industry from federal lending agencies are not here considered. This paper is largely concerned with indigenous funds, rather than with the problem of tapping funds from outside sources, into which latter category federal funds largely fall. Further, since a substantial part of this study is statistical, the exact states covered should be made clear at the start. Included as the South are the 11 Odum-designated southeastern states, bounded on the north by Virginia and Kentucky and on the west by Arkansas and Louisiana. As a standard for statistical comparisons, these states in 1945 contained 21.7 per cent of the nation's total population.[2]

[1] See, for instance, the testimony of John P. Ferris, of the TVA, before the TNEC. *Hearings*, Part 9, pp. 3923–3943.

[2] Estimate of the U. S. Bureau of the Census.

I

Of the institutional sources of short-term funds, commercial banks are admittedly by far the most important and, at the same time, the source on which much more nearly complete data are available, a condition that can be attributed to the longer and more rigid governmental regulation of banks than of other lending agencies.

Pertinent data on the growth of commercial banks in the South and in the rest of the country for the three years 1935, 1940, and 1945 are given in Table I. Insured banks only are covered and the data are as of June 30 in each year.

TABLE I

DATA ON INSURED COMMERCIAL BANKS, 1935, 1940, 1945

(Dollar amounts are in millions.)

	JUNE 30, 1935			JUNE 30, 1940			JUNE 30, 1945		
	South	Other States	U. S.	South	Other States	U. S.	South	Other States	U. S.
Number of banks	2,550	11,571	14,121	2,490	10,944	13,434	2,532	10,765	13,297
Total assets	$3,888	$47,027	$50,915	$5,414	$65,297	$70,711	$16,714	$140,831	$157,544
U. S. govt. securities	722	12,553	13,275	777	16,276	17,053	8,423	80,490	88,912
Loans & discounts	1,235	13,462	14,697	1,968	16,427	18,394	2,663	23,102	25,765
Commercial and industrial loans	[a]	[a]	[a]	643	6,027	6,670	987	8,474	9,461
Total deposits	3,378	40,746	44,123	5,034	58,427	63,461	15,885	131,890	147,775
U. S. government deposits	73	808	881	108	558	666	2,076	21,762	23,838
Total capital[b]	481	5,730	6,210	564	6,108	6,672	768	7,903	8,671

Some errors in totals because of rounded amounts.

[a] Not available.

[b] Capital stock, surplus, undivided profits, and reserves.

Source: Compiled from *Assets and Liabilities of Operating Insured Banks*, Federal Deposit Insurance Corporation, June 30, 1935, June 30, 1940, and June 30, 1945.

Included in the table are number of banks, total assets, United States government securities, loans and discounts, commercial and industrial loans, total deposits, United States government deposits, and total capital. Table II gives the percentage changes in total assets, total deposits, and total capital during the period 1935 to 1945 and 1940 to 1945 for banks located in the 11 southern states and for all other banks.

The tables show the tremendous growth that took place in the commercial banks of the country during the period 1935–1945 and reveal that the major part of the growth took place during the latter five years of the period. Table II, particularly, shows the much more rapid growth of southern banks, as measured by assets and deposits and to a less degree by capital, than that enjoyed by banks of other sections.

The decided lag in the growth of invested capital both in the South and in the rest of the nation, which is revealed by the tables, should be emphasized. The percentage increase in total bank capital was greater in the South than in the rest of the nation both in the 1935–1945 and 1940–1945 periods. However, in spite of this greater rate of increase, southern banks had less capital per dollar of deposits than banks in other regions. In the South, the ratio between deposits and capital in 1945 was 21 to 1, while in the rest of the country it was 17 to 1. This condition of undercapitalization, glaringly apparent for all American banks, is more serious in the South than in the other states and constitutes a problem that must be met before southern banking can make much additional progress.

From the standpoint of southern industrial development, the channels into which the banking assets flow are of primary significance. As is the case for banks in the whole country, the asset item in southern banks showing the

TABLE II

PERCENTAGE GROWTH OF ASSETS, DEPOSITS, AND CAPITAL OF INSURED BANKS IN SOUTHERN STATES AND IN OTHER STATES, 1935–1945 AND 1940–1945

	1935 to 1945		1940 to 1945	
	11 Southern States	All Other States	11 Southern States	All Other States
Total assets	330.0	197.3	208.7	115.7
Total deposits	370.0	223.7	213.6	130.9
Total capital	59.7	37.6	36.2	29.4

Source: Compiled from *Assets and Liabilities of Operating Insured Banks*, Federal Deposit Insurance Corporation, June 30, 1935, June 30, 1940, and June 30, 1945.

greatest increase, both absolute and relative to total assets, is United States government securities. In southern banks, this item increased from $722 million in 1935 to $8.4 billion in 1945, the latter figure being 11.6 times larger than the former. In the rest of the country, United States government securities owned by banks increased 6.4 times between the two dates. However, in terms of the percentage of total assets, southern banks had 50.4 per cent of total assets invested in government securities in 1945 as compared with 57.1 per cent for banks outside the South. Thus, of the total banking assets, a larger proportion were available in the South than in other areas for uses other than carrying the public debt.

Loans and discounts constitute the best measure of the over-all support to private industry furnished by banks. It should be noted that such assets increased by 108.3 per cent in southern banks during the 10-year period 1935–1945 and 71.1 per cent for banks outside the South. In 1945, loans and discounts were 15.9 per cent of total bank assets in the South and 16.4 per cent of bank assets outside the South, indicating little difference in the proportion of funds going to private borrowers in the South as compared with the rest

of the country. It is in attempting to determine the specific industries to which bank loans are made that available data become inadequate. Essentially the only measure of the degree to which the banking system is supporting southern industrial activity, as distinguished for instance from agricultural activity, is the volume of commercial and industrial loans carried by southern banks. These data were not published for 1935, but are available for 1940 and 1945 and are given in Table I. In 1940, commercial and industrial loans in southern banks constituted 32.7 per cent of total loans and discounts and 11.8 per cent of total assets. In the same year in the rest of the United States commercial and industrial loans were 36.7 per cent of total loans and discounts and 9.2 per cent of total assets. Between 1940 and 1945, commercial and industrial loans of southern banks increased 53.3 per cent, while in the rest of the country such loans held by banks increased 45.7 per cent. By 1945, with the major

TABLE III

PERCENTAGE OF BANKS, BANK ASSETS, AND BANK CAPITAL OF THE UNITED STATES IN THE 11 SOUTHERN STATES, 1935, 1940, 1945

	PERCENTAGE IN SOUTH		
	June 30, 1935	June 30, 1940	June 30, 1945
Banks	18.05	18.54	19.04
Assets	7.64	7.66	10.6
Capital	7.74	8.46	8.86

Source: Compiled from *Assets and Liabilities of Operating Insured Banks*, Federal Deposit Insurance Corporation, June 30, 1935, June 30, 1940, and June 30, 1945.

part of bank assets invested in government securities, the relative importance of commercial and industrial loans, of course, declined significantly. However, in 1945 loans to commercial and industrial borrowers constituted 5.9 per cent of total southern bank assets and 37.1 per cent of total loans and discounts. For banks outside the South such loans were 6.0 per cent of total assets and 36.8 per cent of total loans and discounts, or practically the same as the southern percentages.

It appears, therefore, that with its available resources the southern banking system is supporting the industrial activity of the region to a degree equal to the support found in other states. Indeed, in view of the predominantly agricultural activities of the region, it is somewhat surprising and of some significance to find essentially the same proportions of industrial and commercial loans in southern banks as in banks of other regions.

During the 10-year period 1935–1945, with southern banks growing more rapidly than banks in other regions, the proportion of the country's total banking assets in the South naturally increased. This relative growth is shown in Table III. It may be seen from this table that, while the proportion of banks increased from 18.05 per cent in 1935 to 19.04 per cent in 1945, total assets increased from 7.64 per cent to 10.6 per cent. It should be noted that practically

all of the relative growth came in the five-year period 1940–1945. The lag in the growth of total banking capital is here again revealed.

The general causes for the growth of banks in the country as a whole during the period under consideration lay primarily in the expansion incident to government deficit financing both before and during the war and to the tremendous expansion of economic activity during the war. But why did southern banks expand more rapidly than banks in the rest of the country? First, one negative conclusion may be presented. The larger expansion of southern banks did not arise as a result of the federal government's maintaining disproportionately large deposits in southern banks. This is not to say that federal expenditures were not of primary significance in the growth of the banks of the region, but simply that the federal government did not maintain on deposit in southern banks an unduly large amount of funds. In banks outside the South, United States government deposits increased from $808 million in 1935 to $21.8 billion in 1945. Such deposits accounted for 23.0 per cent of the total growth of deposits held by such banks. In southern banks United States government deposits increased from $73 million in 1935 to $2.1 billion in 1945 and accounted for 16 per cent of the increase in total deposits. Thus the expansion of government deposits was responsible for a smaller proportion of the increase of southern bank deposits than of the increase for banks in other sections. In fact, if United States government deposits are eliminated from total deposits in southern banks both in 1935 and 1945, deposits in southern banks still exhibit a growth of 318 per cent, which is decidedly in excess of the 224 per cent increase of *all* deposits in banks of other regions of the country.[3]

In seeking the positive causes of this increase in banking resources in the South, the trend of income for the region naturally should first be examined, for any increase in income would normally be reflected in increased bank resources. Total income payments in the South were $6,976 million in 1935, $9,043 million in 1940, and $21,703 million in 1945.[4] In the first two of these years, 1935 and 1940, southern income amounted to 11.91 and 11.92 per cent, respectively, of the nation's total. In 1945, the South's income had increased to 14.21 per cent of the total. Thus, it is found that during the period 1940 to 1945 when southern banking assets grew from 7.66 per cent of the nation's total to 10.6 per cent, the South's share of the national income grew from 11.92 to 14.21 per cent. It should be noted that the South's share of the national income is greater than its share of commercial bank assets, a fact which indicates that a larger banking system could be supported with concomitant benefits to industry.

Analyzing fully the basic causes for this increase in southern income, which of course constitute the basic causes for the increase in southern banking resources, is beyond the purview of this paper. However, it should be pointed

[3] If U. S. government deposits are subtracted from total deposits of all banks outside the South in 1935 and in 1945, the growth of deposits of these banks is found to be 175 per cent.

[4] *Survey of Current Business*, Aug. 1946.

out briefly that the four rapidly increasing components of income payments during the war period, the effects of which were felt very unevenly among the states, were wages and salaries paid out by war manufacturing industries, agricultural income, federal civilian payrolls, and pay of the armed forces.[5] Of these four, it is unlikely that federal civilian payrolls were disproportionately large for the region as a whole even though such payments might have been responsible for some substantial part of the increase in the state of Virginia. Wages and salaries paid out by war manufacturing industries constituted a much smaller proportion of the region's total income than that of the nation as a whole.[6] Thus the two most important factors contributing to the increase in the South's income were pay to the armed forces, arising from the large amount of military training carried on in the South, and increased agricultural income, due to rapidly rising agricultural prices. While these were the more important factors during the war period, over the longer run there were other factors at work. Income payments in the South were 4 per cent higher in 1940 than they had been in 1929, in contrast to the 10 per cent decline for the rest of the country. This gain stemmed primarily from the growth of manufactures in the region. In 1940, factory payrolls were up 12 per cent over the 1929 level in the South, but off 7 per cent on the average for the rest of the country. During the war period, the South's expansion of factory payrolls continued to exceed the national average, despite the substantially lesser importance of war industry in this region than elsewhere.[7]

In addition to the general expansion of the region's income, one other factor should be mentioned in accounting for the growth of banking resources. In spite of the gains in manufacturing, the South is still primarily an agricultural region, and as has been pointed out, enjoyed along with other agricultural regions much higher farm prices during the war period. The growth of bank deposits from 1940 to 1945 in the South was 214 per cent, while the growth in income payments was 129 per cent. In dominant industrial regions, the rate of increase in bank deposits was smaller than the increase in income payments. Industrial regions continued during the war to purchase the farm products of the South and of other agricultural regions and paid higher prices for these products, while purchases of industrial products by the agricultural population were curtailed by the diversion of industrial production to war supplies, resulting in a greater than normal net flow of funds into the banks of agricultural regions.[8]

Other factors causing this disproportionate growth of banking resources in the South might well be investigated, such for instance as a comparison of the volume of funds raised through federal taxation and the sale of government bonds to nonbank buyers with the volume of federal expenditures in the region.

[5] *Ibid.*

[6] In 1940, 3.5 per cent of the South's income was paid out by war manufacturing industries, compared with 9.7 per cent for the country as a whole. In 1944, the figures were 8.5 per cent for the South and 19.0 per cent for the nation. *Survey of Current Business*, Aug. 1946.

[7] *Ibid.*

[8] *Annual Report of the Federal Deposit Insurance Corporation*, 1944, pp. 57 ff.

Yet the greater income of the region shows the basic reason for the growth of bank assets, and the continued sale of agricultural products coupled with a forced reduction of purchases of industrial products serves to indicate the type of forces at work producing a greater growth of bank resources in the South than in the rest of the nation.

With respect to the other more important institutional sources of short-term funds—commercial paper houses, factors, and accounts receivable discount houses—none of the larger ones can be classed as southern. Commercial paper houses and factors, both of which are located almost exclusively in the East, no doubt have some southern business. In view of the prominence of the factor in the textile industry, eastern factors very likely handle a relatively large amount of southern business. There are small firms in the South supplying funds to business by discounting accounts receivable on a non-notification basis, and the largest national organization carrying on this type of business, Commercial Credit Corporation, operates branches in the region and, indeed, maintains its home office in Baltimore, just outside the region.[9] But admittedly the proportion of concerns of these types located in the South is exceedingly small and so far as the strictly southern firms are concerned must be recognized as of little consequence. Such financial aid as southern business obtains from eastern firms can best be regarded as an importation of outside funds.

II

Three sources of long-term funds for industrial development in the South will be examined, namely, life insurance companies, investment banking channels, and earnings reinvested by businesses. For only one of these sources, life insurance companies, are the data even approximately satisfactory.

The concentration of life insurance assets, both geographically and in a few large companies, is generally recognized. With some 25 companies, none of which is located in the South, holding approximately 87 per cent of the life insurance assets of the nation, it is not surprising that southern life insurance assets are meager. However, during the past decade and a half some improvement here can be noted. From 1930 to 1945 admitted assets of southern life insurance companies grew from $408 million to $1,296 million, or 218 per cent.[10] During the same period, admitted assets of life insurance companies in the nation grew from $18.9 billion to $44.7 billion, or 137 per cent.[11] In 1930 southern assets represented 2.16 per cent of the total and in 1945, in spite of showing some relative growth, amounted to only 2.90 per cent of the nation's total.

It is thus apparent that in a very real sense assets of southern life insurance companies are still of little significance. However, a few individual companies in the South have made major strides and in 1945 there were three companies with assets in excess of $160 million. It is of some interest to note that, after

[9] R. J. Saulnier and N. H. Jacoby, *Accounts Receivable Financing*, pp. 47–53.
[10] Compiled from *Best's Life Insurance Reports*, 1946.
[11] *Ibid.*

these first three companies, admitted assets of the fourth and fifth ranking companies were approximately $100 million less. The possibility of a few relatively large companies making substantial contributions to the development of southern industry is a question the study of which, while not pursued here, might prove enlightening to the general problem at hand.

With by far the major part of the life insurance companies located outside the South, and with major companies of other regions operating in the South, it is without question true that a large part of the premiums paid by southerners for life insurance are paid to companies outside the region. To what extent do these companies invest these funds in the South? An answer to this question for one year, 1938, can be given.[12] On December 31, 1938, life insurance companies holding membership in the Association of Life Insurance Presidents had cash and earning assets of $23.4 billion.[13] Of this amount, $4.7 billion were invested in United States government securities, leaving $18.7 billion that could be allocated on a state basis.[14] Of this amount, $2,164 million or 11.5 per cent was invested in the South. Is this amount reasonable, relative to the business arising in the South? The best measure of the amount of business arising in the South is total reserves held against southern policies outstanding. In 1938, such reserves amounted to 9.2 per cent of total reserves as compared with investments of 11.5 per cent. Thus, life insurance companies as a whole are investing in the South a larger proportion of their funds than warranted simply by the volume of business arising from within the region.

While all investments of insurance companies will aid the southern economy and hence indirectly aid southern industry, only a part of such investments go directly to southern industry. Of the total investments of life insurance companies in the South in 1938, $834 million are represented by stocks and bonds of private corporations. Of this amount, $729 million are stocks and bonds of railroads and public utilities, leaving only $105 million for industrial corporations. This amount represents only 4.9 per cent of the total of insurance company investments in the South, while securities of industrial corporations represent 8.0 per cent of the total of life insurance company investments, exclusive of United States government bonds, in the nation as a whole.[15] Thus,

[12] The question can be answered on a *regional* basis for years later than 1938. A regional breakdown of life insurance company investments is made by the Association of Life Insurance Presidents but the regional classification used is sufficiently different from the one in this paper to introduce substantial errors. The data presented are from a study made by this same association for TNEC in which investments are broken down on a state basis. It is recognized that the percentages have undoubtedly changed but it is thought that this older study is preferable to the later studies using a substantially different regional basis.

[13] TNEC *Hearings*, Part 28, pp. 15582–15593.

[14] Actually, the association in making its classification of assets by regions allocates U. S. government bonds among regions on a population basis. It is thought preferable for the purposes of this paper to eliminate such securities from the computations. Stocks and bonds of private corporations operating in several states are prorated by the association in accordance with the geographical distribution of the property securing the investment.

[15] TNEC, *Hearings*, Part 28, pp. 15582–15593.

while life insurance companies support southern railroads and public utilities and even southern agriculture, southern industry in the narrow sense of the term has received relatively meager assistance.

The generally regarded normal means for a business corporation to obtain new long-term funds is through the offering of its long-term securities, either stocks or bonds, to the public through investment banking channels. In examining the supply of southern long-term funds available for business financing, it would be desirable to obtain data on the amounts of new corporate securities purchased over a period of years through investment banking channels by southerners. This would not give an exact picture of the flow of southern funds into southern business, for southerners obviously buy securities of non-southern enterprises. However, by showing specifically the volume of southern funds going into new corporate securities, such data would, better than any other, measure the supply of new southern funds saved by individuals and available to industry on a long-term basis. Such data, desirable though they may be, simply are not to be had. I can think of no means of obtaining them short of searching the accounts of all southerners with all dealers of new securities.

Accordingly, an investigation of the problem of the supply of southern funds available to southern industry through normal investment banking channels must be approached indirectly. Two approaches to the problem are undertaken: (1) to what extent is the investment banking business developed in the South? and (2) what volume of funds does southern industry attempt to raise through the offering of new securities?

Data published by the Securities and Exchange Commission in 1939, and not since kept current, give underwriting participations of investment banking houses by states in registered issues from January 1, 1934, to June 30, 1938.[16] As is to be expected, most issues were handled by New York firms. Of a total of $7,584 million of registered securities, participations amounting to $5,861 million or 76 per cent were carried by New York houses. Of the total, southern investment houses had participations amounting to only $10,989,000, or approximately $\frac{1}{7}$ of 1 per cent of the total. Southern participations amounted only to approximately $\frac{5}{8}$ of 1 per cent of participations of all firms outside New York City. These figures perhaps prove too much. It should by no means be inferred from them that the volume of southern funds being invested in new securities is a small fraction of 1 per cent of the total funds of the nation being so invested. The figures given are for the *underwriting* participations; they do not show dealer participations. Also, it is likely that a substantial part of the new industrial securities purchased by southerners are bought from firms whose principal offices are in the East. But the data do confirm the generally accepted view that the region's investment banking industry is quite limited in so far as the underwriting of corporate securities is concerned.

On the other hand a check of the membership of the Investment Bankers Association of America reveals, surprisingly enough, that of the 686 member

[16] *Selected Statistics on Securities and on Exchange Markets*, Securities and Exchange Commission, Aug. 1939, Table 33.

firms of the association, 78, or 11.3 per cent, are located in the South and also, that members of the association maintain 43 branch offices in the South.[17] These figures do not include strictly brokerage offices maintained by firms doing both an investment banking and stock brokerage business. This reasonably large number of southern investment banking houses coupled with the scant volume of underwritings of southern houses indicates that the individual firms are small and that a substantial part of their business is in the municipal bond field.

From the standpoint of facilitating the growth of southern industry, it would be highly desirable to develop further the investment banking business of the region. This does not mean that the region needs more firms; but rather that it needs firms whose facilities are directed more toward the handling of the corporate securities of the region. The small southern corporation, particularly, is placed at a disadvantage by the lack of regional investment banking facilities.

The operation by an investment banking firm of a department designed for the origination of new industrial securities is expensive and can be carried successfully only if the volume of securities handled is large. To obtain the development of such facilities in the South, it seems necessary that the southern investment houses would have to manage the issues of the larger southern corporations. But large southern corporations can and do approach the eastern houses for new financing. There is no incentive for them to do otherwise. They receive the same accommodations and obtain the same advantages as large corporations in all sections of the country. With investment banking resources for industrial financing concentrated in New York City—as is perhaps essential for economical operation—it appears unlikely that there can be in the South any major development of private investment banking houses operating industrial financing departments which would provide small southern enterprises with a relatively easy and inexpensive entry into the market for long-term funds.[18]

The second approach made to the problem of the availability of southern savings to southern industry through investment banking channels has been to compile for two 12-month periods the volume of new securities offered for sale by southern corporations. The periods used are July 1940 to June 1941, an immediate prewar period, and July 1945 to June 1946, roughly our first postwar year. These data are summarized in Table IV. Table V, giving new security issues for the whole country for the two periods, is included for purposes of comparison.

For the prewar 12-month period July 1940–June 1941, new southern issues amounted to 14.3 per cent of the total. Of the southern issues, 23.6 per cent were for new money as compared with 27.2 per cent for the whole country. In both the South and the country as a whole, the largest category of securities was refunding bond issues of public utility enterprises. Of the $432 million

[17] Compiled from the membership list of the Investment Bankers' Association of America, *Bankers Directory*, 1st 1946 ed.

[18] The problem is by no means limited to the South.

of new southern securities, only $52.3 million, or 12.1 per cent, were of industrial corporations; i.e., corporations other than railroads and public utilities. For the country as a whole such securities amounted to 34.6 per cent of the total.

TABLE IV

NEW SECURITIES OFFERED BY CORPORATIONS IN THE SOUTH, JULY 1940–JUNE 1941 AND JULY 1945–JUNE 1946

(in thousands of dollars)

	JULY 1940–JUNE 1941			JULY 1945–JUNE 1946		
	New Money	Refunding	Total	New Money	Refunding	Total
Bonds[a]						
Railroads	$56,310	$32,025	$88,335	$5,048	$71,758	$76,806
Public utilities	14,384	223,392	237,776	970	86,780	87,750
Industrials[b]	489	21,154	21,643	9,514	120,976	130,490
Totals	$71,183	$276,571	$347,754	$15,532	$279,514	$295,046
Stocks						
Railroads	none	none	none	none	none	none
Public utilities	2,710	50,520	53,230	13,116	21,286	34,402
Industrial[b]	28,285	2,409	30,694	130,235	50,724	180,959
Totals	$30,995	$52,929	$83,924	$143,351	$72,010	$215,361
Totals						
Railroads	$56,310	$32,025	$88,335	$5,048	$71,758	$76,806
Public utilities	17,094	273,912	291,006	14,086	108,066	122,152
Industrials[b]	28,774	23,563	52,337	139,749	171,700	311,449
Totals	$102,178	$329,500	$431,678	$158,883	$351,524	$510,407

[a] Includes short-term notes.

[b] Includes all issues not elsewhere classified.

Source: Compiled from "New Capital Flotations," published monthly in *Commercial and Financial Chronicle*. In compiling the data for this table, the question of geographical classification naturally arose. No attempt was made to break down a given corporation as partly southern and partly nonsouthern. Corporations operating generally over the entire country, including the South, were not included. Corporations having several important producing facilities, located part in the South and part outside, were included only if the major part of such facilities were located in the South. The borderline cases were infrequent.

The volume of new securities issued in the United States during the period July 1945–June 1946 increased 140 per cent over the earlier period, but the issues from the South did not keep pace, increasing only 23.4 per cent. In this latter period, southern issues were 7.05 per cent of the total of new security issues for the country as compared with 14.3 per cent for the earlier period. However, of the southern issues, 31.1 per cent were for new capital as compared with 25.9 per cent for issues of the country as a whole. For this second period

there is a significant difference in the composition of the southern and national groups of securities. For the country, the largest category of new issues was public utility refunding bonds, and the second largest, railroad refunding bonds. For the South, the largest category was industrial stocks issued for new money and the second largest, industrial refunding bonds. Industrial issues constituted

TABLE V

NEW SECURITIES OFFERED BY AMERICAN CORPORATIONS, JULY 1940–JUNE 1941 AND JULY 1945–JUNE 1946

(in millions of dollars)

	JULY 1940–JUNE 1941			JULY 1945–JUNE 1946		
	New Money	Refunding	Total	New Money	Refunding	Total
Bonds[a]						
Railroads	$255	$160	$415	$72	$1,281	$1,354
Public utilities	275	1,115	1,390	111	2,047	2,158
Industrials[b]	160	742	902	564	1,165	1,729
Totals	$690	$2,017	$2,707	$747	$4,493	$5,241
Stocks						
Railroads	none	none	none	$5	[c]	$5
Public utilities	25	147	172	77	348	425
Industrials[b]	110	35	145	1,047	522	1,569
Totals	$135	$182	$317	$1,129	$870	$1,999
Totals						
Railroads	$255	$159	$414	$78	$1,281	$1,359
Public utilities	299	1,262	1,561	188	2,395	2,583
Industrials[b]	269	777	1,046	1,611	1,687	3,298
Totals	$823	$2,198	$3,021	$1,877	$5,363	$7,240

[a] Includes short-term notes.
[b] Includes all issues not elsewhere classified.
[c] $80,000.
Source: Compiled from "New Capital Flotations," published monthly in *Commercial and Financial Chronicle*.

61.1 per cent of the total of new Southern issues as compared with 45.5 per cent of the total of new issues for the entire country. However, even with this relative increase, southern industrial securities accounted for only 9.4 per cent of the total of such securities for the entire country.[19]

That the volume of new corporate financing arising in the South is small is by no means surprising. The bulk of the nation's corporate assets are located

[19] The two periods surveyed are not sufficient to justify any except very tenuous conclusions. However, the smaller proportion of total issues arising in the South is offset to some degree by the increased importance of industrial securities in the southern total.

in other regions and naturally from that fact the bulk of corporate security issues arise from other regions. This is particularly true in light of the large volume of securities issued for refunding purposes. Also, of the industry in the South, a substantial part is made up of small enterprises which typically have difficulty in using formal investment channels.

While business can and does look to insurance companies and investment houses to meet a part of its new money requirements, for American business as a whole retained earnings have been used in recent years to meet an even greater part of its requirements.[20] For a substantial part of the small businesses in the South this is the only source of new long-term funds. Certainly this source is of sufficient importance to necessitate an examination of business earnings in any survey of financial resources for industry. To what extent, then, can southern industry expect to finance itself by reinvesting earnings? Again it is necessary to admit that the data are meager. However, information from two sources is suggestive.

The first source is *Statistics of Income*, Part 2, covering corporate income tax returns. Before presenting these data, the limitations inherent in them should be noted. As stated in the publication:

> The data, although tabulated by States and Territories in which returns are filed, do not represent what may be called the geographic distribution of income. Returns filed in a State may not be a complete coverage of all corporations whose principal place of business is located therein. Conversely, a tabulation from a given State may include data from returns of corporations having their place of business in another State. A corporation may file an income tax return either in the collection district in which it has its principal place of business or in the collection district in which it has its principal office or agency. There is no way of ascertaining from income tax returns the amount of income originating in a specific State or the amount of tax paid thereon.[21]

However, since there are no southern states particularly active in the issuance of charters to corporations doing business primarily in another state, the data probably understate rather than overstate southern corporate income. With these qualifications in mind, the data from *Statistics of Income* show corporate earnings by states and hence the volume of such earnings available for taxes, dividend payments, and reinvestment. For the three years 1939, 1940, and 1941 the proportion of firms reporting from the 11 southern states remained constant at 10.8 per cent of the total. The proportion of the total corporate income reported from the South remained practically constant for the three years, being 6.99 per cent in 1939, 6.93 per cent in 1940, and 7.01 per cent in 1941. Absolutely, corporate income during these three years expanded both in the South and in the entire nation. For the South, net income of corporations before federal income and excess profits taxes increased from $471 million in 1939 to $1,146 million in 1941.[22] In 1941, with high income and excess profits

[20] C. C. Abbott, *Financing Business During the Transition*, p. 13.
[21] *Statistics of Income for 1941*, Part 2, p. 4.
[22] *Ibid.*, pp. 281–292.

taxes, income of southern corporations after taxes amounted to $682 million. Of this sum, $294 million was reinvested, which amount is almost three times as great as the $102 million of new money obtained by the issuance of securities—refunding issues excluded—in the period July 1940 to June 1941, and almost twice as great as the $159 million of new money obtained by the issuance of securities in the July 1945–June 1946 period. In short, using the Internal Revenue Bureau's figures at their face value, it seems apparent that the main hope for long-term funds for southern enterprise lies in reinvestment of earnings, small though the amount of these earnings be relative to the nation as a whole.

A second source of information on earnings of business enterprise available for reinvestment is the *Census of Manufactures*. Here, again, no direct information is available. But from this census some facts of significance to the general topic may be gleaned. The data obviously apply only to manufacturing industry and are for the year 1939, the date of the most recent *Census of Manufactures*.

The census does not give any earnings or profits figures, hence any data concerning them must be derived. As a starting point take "value added by manufacture," which is the value of the product less the cost of materials, supplies, fuel, electric energy, and contract work. From "value added by manufacture," deduct total wages and salaries. This gives a balance which would be made up of all other expense items plus any profit. Specifically, it would include primarily advertising, rent, depreciation, taxes, interest, and profit. Obviously, all of this balance cannot be regarded as available either for reinvestment or dividends. Advertising, taxes, rent, and interest give rise to out-of-pocket payments. Most of the remainder, namely depreciation and profit, indicate sources from which funds can be drawn for maintaining or adding assets. If the assumption is made that advertising, taxes, rent, and interest, taken together and in proportion to the volume of business done, are no higher for southern manufacturers than for those in the whole country, then a comparison of the balance obtained by subtracting wages and salaries from value added by manufacture for manufacturers in the South with this same balance for manufacturers in the whole country will indicate the ability of southern manufacturers to expand out of earnings, relative to the ability of manufacturers in the whole country. Such a procedure has been followed.

For the year 1939, value added by manufacture in the South amounted to $2,593 million, or 10.5 per cent of the nation's total. Wages and salaries paid by manufacturing industry in the South amounted to 9.5 per cent of the nation's total. After subtracting wages and salaries from value added by manufacture, this "balance" for the South is 11.6 per cent of this "balance" for the whole country as compared to its 10.5 per cent of value added by manufacture.[23] On the basis, then, of the stated assumption, namely, that advertising, taxes, rent, and interest cost no more in the South than in other regions, southern manufacturers have a slight advantage over manufacturers in other regions in the matter of the availability of earnings for new investment. This is of course a relative advantage, i.e., relative to the amount of manufacturing carried on. In terms

[23] *Census of Manufactures*, 1939, Vol. III, pp. 44, 45.

of absolute amounts, the volume of earnings available to the southern manufacturer is not large, but on a relative basis, southern manufacturing industry appears to be in a position to expand from reinvested earnings somewhat more easily than manufacturers in other regions. This conclusion, it should be remembered, is based upon 1939 data. It is altogether possible that the operations of the Fair Labor Standards Act of 1938, and other forces reducing North-South wage differentials, may have eliminated any advantage that existed.

III

Summarizing this survey of the South's financial resources as of 1945, or approximately that date, commercial banks of the region had 10.6 per cent of the nation's total banking assets. Southern life insurance companies had 2.9 per cent of the nation's total life insurance assets, but life insurance companies had 11.5 per cent of their investments in the region. There were 11.3 per cent of the investment banking firms holding membership in the IBA located in the South, but by no means that proportion of the country's investment banking capital or personnel. The corporations of the region offered 7.05 per cent of the total of new securities offered in the country as a whole and had 7.01 per cent of corporate earnings.[24] For a region containing 21.7 per cent of the population of the nation, these percentages are not encouraging. That a substantial part of this population is engaged in agricultural pursuits results in materially reducing some of these percentages. But basically the percentages are low because the region relative to the rest of the nation is poor. Despite the relative and absolute gains in income noted above, per capita income is still lower in the South than in any other region, and 33 per cent below the national average.[25]

The picture is, however, by no means all black. For the most important type of financial institution and the one for which relative changes in size can be most accurately determined, namely, commercial banks, substantial gains have been made. This constitutes the brightest spot in the entire financial situation. Commercial banks are in a position to support a much larger volume of industrial production than formerly. The use of the traditional short-term loan will not, however, be sufficient. Accommodations to industry through the increasingly important term loan must be resorted to, thereby giving industry a chance to repay such loans out of earnings and thereby add to its capital by reinvestment of earnings. It is through this general method of financing that, using existing financial institutions, the indigenous capital of the region can be canalized into its small and medium-size businesses. The development of new governmental or semigovernmental institutions for aiding small businesses would doubtless facilitate the process. But there is little hope for the small and medium-size corporation obtaining much long-term capital by the sale of securities to the public with existing investment banking facilities and practices.

[24] This latter figure is for 1941 and must be interpreted in light of the qualifications mentioned above in connection with the discussion of the Bureau of Internal Revenue's data on corporate income.

[25] *Survey of Current Business*, Aug. 1946.

The large southern corporations will and must continue to go outside the region for their capital requirements. And they should be encouraged to do so, pending some change in the geographical concentration of investment banking facilities. By going outside the South, they are able to take advantage of the lower interest rates obtainable[26] and at the same time leave for the smaller southern corporations a larger part of the at best small amount of regional capital. This reliance on outside funds is not without its disadvantages. It places to some extent the control of the South's economy in the hands of nonsoutherners. And it requires a drain from the South in the form of interest and dividends. The latter complaint can be fairly well dismissed by saying the income would not be there from which to pay the interest and dividends if the original capital had not been imported. Certainly the use of this outside capital results in substantial income for southern labor that would otherwise not be had. The former complaint, that outside funds give control of southern industry to nonsoutherners, and, as sometimes stated, results in essentially a colonial economy, may be admitted but the degree of exploitation of the region arising from this situation is undoubtedly not so great as it once was, and there seems some reason to believe the condition will continue to improve. In any event, if further expansion of southern industry is to take place at even a moderate rate, substantial reliance must be placed upon outside capital in those industries requiring heavy fixed asset investments—railroads, public utilities, and the metal working industries, to mention the outstanding ones—and on balance the economy of the region will benefit from this imported capital.

[26] See J. S. Henderson, "Regional Differences in Interest Rates," *The Southern Economic Journal*, Oct. 1944.

SOME ECONOMIC CONSEQUENCES OF FEDERAL AID AND SUBSIDIES TO SOUTHERN AGRICULTURE

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I

To speculate about the long-range consequences of an economic policy is a luxury often reserved for good times. Agriculture in the United States and in the South has been faced with a series of crises demanding immediate solutions ever since the federal government began its subsidy and control programs. During the first part of the period the nation was suffering from vast unemployment of its labor and resources with a consequently greater depression in agricultural incomes.[1] For southern agriculture the problem was not so much one of obtaining fair and adequate income as one of assuring an income sufficient to remove at least some of the widespread economic distress. During the war years most aims were subordinated to the larger purpose of winning the war. Then the problem became one of increasing and directing production to meet the requirements of a war economy. Perhaps now, however, there is time to engage in the luxury of thinking about longer-term problems.

Measured in terms of parity, farm prices in September 1946 were higher than they had been since May 1920. In 1945 cash farm income and government payments amounted to 3.9 billion dollars in the Southeast compared with 796 million dollars for 1932 or an increase of 393 per cent. During the same period cash farm income throughout the United States rose 354 per cent. Cash farm income and government payments in the 13 southeastern states were 83 per cent as much as total cash farm income was for the United States as a whole in 1932.[2]

[1] From 1929 to 1932 total income payments to individuals in the United States declined 43 per cent. In the Southeast they declined 41 per cent (*Survey of Current Business*, Aug. 1946, p. 20). Cash farm income fell 58 per cent in the United States and 61 per cent in the Southeast (cash farm income from U. S. Dept. Agriculture estimates). The Southeast as used here and elsewhere includes the states of Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, and Virginia.

[2] Cash Farm Income and Government Payments

(Millions of dollars)

	U. S.	SOUTHEAST		U. S.	SOUTHEAST
1932	4,743	796	1939	8,665	1,639
1933	5,445	976	1940	9,123	1,586
1934	6,780	1,423	1941	11,742	2,061
1935	7,659	1,487	1942	16,013	2,823
1936	8,654	1,634	1943	20,014	3,537
1937	9,155	1,764	1944	21,041	3,926
1938	8,134	1,621	1945	21,551	3,926

Source: U. S. Dept. of Agriculture.

Of course much of this gain has been offset by an increase in the price of things farmers buy and by increased expenses. The prices for the principal farm products produced in the region, however, in 1945 were well above parity. About one-half of the total increase in cash farm income and government payments from 1932 through 1945 occurred from 1940 to 1945. During these years, contrary to conditions ordinarily experienced in agriculture, both output, with the exception of cotton, and prices increased. Not only was it possible to sell the increased production at higher prices, but it was also possible to dispose of accumulated surpluses. Of particular importance to the Southeast is the reduction of the American cotton carry-over from 12 million bales at the beginning of the 1941 season to 7.5 million bales in August 1946.[3]

Despite the present relatively advantageous position of southern agriculture, concern about the future is felt in many quarters. There are those who remember their experience after the last war when cotton climbed to 45 cents in 1920, only to fall by the end of the year to less than a third of that price. Southern bankers remember their experience after that period when there was a drain upon their deposits to other regions. At that time they were unable to realize on their loans made on the security of cotton. They are now fearful that a similar decline may take place again. Although the consequence of a fall in the price of cotton is unlikely to be so disastrous to the banks now because of the relatively small amounts of cotton loans held, the importance of agricultural income in the South is so great that a similar decline in agricultural prices is apt to have very great repercussions on the southern economy.

Even those who believed in the possibility of continued full employment see difficulties in maintaining present agricultural prices. It is predicted that the American farmer will produce more than can be bought at present prices. To carry out the provisions of the Steagall Amendment and other federal guarantees to support prices of many commodities will eventually require either a considerable curtailment of production or the use of enormous government subsidies, or a combination of both.[4] For the South particularly, the adjustments required may be very great.

There is first the primacy of cotton in the southern economy. In most of the southeastern states, sale of this crop accounted for a very great part of

[3] Bureau of Agricultural Economics, U. S. Dept. of Agriculture, *The Cotton Situation*, Sept. 1946, p. 22. BAE predicted that the carry-over on August 1, 1947, will be a little over 4,000,000 bales (*ibid.*, p. 4).

[4] For a discussion of postwar prospects see G. S. Shepherd, *Agricultural Price Control*, pp. 275–296; T. W. Schultz, *Agriculture in an Unstable Economy*, pp. 3–34; R. B. Schwenger, "The Prospects for Postwar Agricultural Exports from the United States," *Journal of Farm Economics*, Feb. 1946, pp. 42–53; Committee on Parity Concepts, "Outline of a Price Policy for American Agriculture for the Postwar Period," *op. cit.*, p. 388; Phillip E. Jones, "Postwar Adjustments in Cotton Production in the Southeastern United States," *Journal of Land and Public Utility Economics*, Nov. 1945, pp. 339–340.

Two main classes of laws dealing with price support for agricultural prices have been enacted: (1) laws dealing directly with price support operations and (2) laws which have an indirect price supporting effect. The former divides agricultural commodities into three groups. These are first, the so-called basic commodities—corn, wheat, cotton, tobacco, rice, and peanuts for oil—which shall be supported at 90 per cent of parity for at

total cash returns from marketing in 1945.[5] The prospects of cotton's retaining its 1945 price without aids for any considerable length of time are extremely dubious. When present high domestic demands are met and the normal channels of world trade are reestablished, it is predicted that to maintain cotton at even a parity price will be a problem calling once more for production controls, increased export subsidies and accumulation of surplus stocks by the Commodity Credit Corporation.[6] The immediate demands after the decline in the price of cotton in October 1946 that the government "do something" are symptomatic of still greater outcries in the future.

Yet high prices for southern agricultural products do not necessarily provide the solution for southern problems despite current emphasis. Neither 50-cent cotton, no matter whether it is the result of a free market or of a government price support program, nor, on the other hand, 10-cent cotton will alone assure a desirable evolution in southern agriculture. There are more important problems facing southern agriculture than that of maintaining high agricultural prices. There are, indeed, more important questions than that of assuring the southern farmer a higher or stable income.

From the standpoint of the southern economy as a whole, the postwar economic problem is the same as it has been in the past: how to secure the optimum use of southern resources. Purely on economic grounds a desirable governmental policy for southern agriculture is one that results in a condition in which the marginal productivity of labor, land, and capital in southern agriculture would be equal to the marginal productivity of these factors in agriculture in other regions and at the same time equal to the marginal productivity of the factors in any other type of economic activity.

It has long been apparent that this ideal allocation of resources has not existed in southern agriculture. The ratio of labor to land is higher than in other regions. Returns to labor are lower than in other types of economic activity even in the South. Less than the optimum amount of capital is employed.[7]

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least two years after the formal ending of the war. The second includes the so-called Steagall commodities, which are those for which the Secretary of Agriculture requested an expansion of production for war purposes. Support at 90 per cent of parity is required for two years after the war. Steagall commodities include among others hogs, eggs, chickens, and soybeans and peanuts for oil. The third class of commodities are to be kept in a "fair parity relationship" to the extent funds are available.

[5] Cash returns from cotton and cottonseed constitute only 7.4 per cent of the cash income from crops and 3.1 per cent of total cash income and government payments for the Southeast as a whole. The relative unimportance of the crop in Florida, Kentucky, and Virginia explain the low figures. In the other states sales of cotton and cottonseed were much more important—57.3 per cent of cash farm income and government payments in Mississippi and from 8 per cent up to 38 per cent in the other states. Despite war crops, income from cotton is still of primary importance.

[6] Jones, *op. cit.*, pp. 339–340. See also R. B. Johnson, "Some Observations on the Cotton Situation," *Monthly Review*, Federal Reserve Bank of Dallas, Oct. 1, 1946, pp. 125–132.

[7] See Rupert B. Vance, *All These People*, pp. 156–160; and Jones, *op. cit.*, p. 344. For the four states of Alabama, Georgia, Mississippi, and South Carolina in 1939, 34 per cent of all the farmers harvested only 8 per cent of the cotton and the average value of all products

Many farm units are generally considered to be below the optimum size for efficient operation. As a result of this maladjustment of resources, conditions in southern agriculture are such that a solution of southern agricultural problems has been termed a solution of rural poverty.[8]

II

The price system, either through the functioning of so-called "free prices" or through "managed prices" has been the most popular tool relied upon to make the proper adjustments in southern agriculture. However, because the maladjustments leading to the uneconomic use of southern resources are caused by factors not controlled directly by prices, neither managed nor free prices have solved the problem in the past. For the same reason, it is unlikely that either of these policies alone will do the job very well in the future without very great aid in other directions.

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produced was $349. Fifty-nine per cent of the farmers produced less than $490 per farm. The average realized net income per farm was considerably below the United States average in every one of the southeastern states with the exception of Florida. Nonmoney income, including products consumed and imputed rents, was nearer the national average. Nonmoney income is a much greater proportion of total gross income in most southeastern states than in the United States generally. There were, of course, more persons per farm in the Southeast to consume this income than in other regions. The implication may be that in a modern economy an increase in the value of the products per person that southern farmers sell rather than consume is the greatest problem in raising southern farm income per person.

AVERAGE REALIZED NET INCOME OF FARM OPERATORS, PER FARM, 1945

	PER CENT OF U. S. AVERAGE		PER CENT NONMONEY INCOME IS OF GROSS INCOME—1945
	Total Realized Net Income and Government Payments	Nonmoney Income	
Alabama	49	98	31
Arkansas	52	79	22
Florida	173	77	6
Georgia	61	102	24
Kentucky	72	94	21
Louisiana	62	86	20
Mississippi	44	75	26
North Carolina	87	101	19
South Carolina	52	93	23
Tennessee	56	98	27
Virginia	75	133	25
U. S.	100	100	13

Source: Computed from data in *Farm Income Situation*, July 1946.

[8] See E. L. Rauber, "Low Income Groups in Southern Agriculture," in *Agriculture Adjustment and Income*, pp. 51–60.

The assumption that if all the government's influence over the prices of agricultural products were removed the agricultural problem would be solved is implicit in a recent statement appearing in a business publication: "If the farmer does business in a protected market, he goes right ahead producing the same things he has always produced. His farming ceases to be responsive to supply and demand."[9] Those arguing for free prices as a solution for the agricultural problem generally choose cotton as an example of the evils of government price raising. According to such a theory, government aids and subsidies have raised the price of American cotton to a price higher than one at which the crop can be sold locally and higher than the world price. Freed thus from controls exerted by the action of supply and demand, farmers produced more cotton than would be consumed in the United States at the price set. This higher than world price results in the loss of export markets unless extensive export subsidies are made. On the other hand, it is contended, had cotton been freed from price support and had production controls been removed, the price of American cotton would have declined to the world price and production adjustments would have been made.

So far, this is a comparatively realistic statement of what could probably be expected. It has been found that prior to 1933 the acreage planted in cotton in each year has been closely related to the average prices of cotton and cottonseed in the preceding year.[10] It is by no means certain, however, that the basic resource adjustments will automatically take place. Perhaps the difficulty is that, although prices may adjust production, they may not necessarily reallocate the factors of production to better uses.

Evidence of past experience on the inefficiency of the price system in accomplishing these adjustments is countered with such statements as "the conditions of the early 30's were not due to a free market but to outside influences."[11] Presumably, these "outside influences" are the results of the business cycle. Yet, in an economy such as ours that is constantly subject to fluctuations in business activity, the correctness of an attempt to apply a theory based on the assumptions of economy operating under conditions of full employment is open to question.

To illustrate, from 1929 to 1933 the index of the price of cotton fell from 144 (1914 equals 100) to 64. In the cotton states per capita gross farm income declined 50 per cent. The decline was greater than the decline in the per capita gross farm income in 48 states. In 1929 the per capita farm income in the cotton states was 37 per cent of total per capita income payments to individuals in the United States. By 1933 it was 34 per cent. It declined from 73 per cent of all southeastern per capita income payments to individuals in 1929 to 65 per cent of those payments in 1933.

Under the theory of free prices at present advocated these conditions should

[9] "The Outlook," *Business Week*, Sept. 7, 1946, pp. 9–10.

[10] Arthur C. Bunce, "Adjustments in Cotton Production," *Monthly Review*, Federal Reserve Bank of Atlanta, Aug. 31, 1944, pp. 61–63.

[11] F. A. Harper, *The Crisis of the Free Market*, p. 54.

have been clear signals for a decline in the number of persons on southern farms. Actually, the number of persons on farms in these states increased between 1929 and 1933 to the highest point in the 17-year period from 1929 to 1945. Also, quite opposite to what would be expected, the number of persons on southeastern farms has declined during periods when income per person in those states has been increasing both relatively and absolutely to that of persons in other regions.[12]

From 1933 onward, there has been a government program of one kind or another attempting to raise the price of cotton. Perhaps it might be contended that, in so far as this program was successful, it prevented the adjustments that should have taken place. However, neither the price support program nor the government payments were sufficient to bring the income up to levels where it would make it advantageous for a worker to migrate to farms during the periods when the numbers on farms were increasing. It is a question of how far prices would have to fall to bring about these adjustments. Artificially high prices may have kept up the uneconomic production of certain crops. Unless we are certain that there were better alternatives open, we cannot be sure it was the chief factor preventing correct distribution of resources.

Of course, the relative prices of agricultural products were not the principal

[12] Relative income positions in the Southeast are shown below, together with relatives of the number of persons on farms.

PER CAPITA GROSS INCOME PER PERSON ON FARMS IN COTTON STATES AS PER CENT OF				INDEX OF NUMBER OF PERSONS LIVING ON FARMS
	Income Per Person on Farms, U. S.	Per Capita Income Payments		Cotton Growing States 1929-100
		U. S.	S. E.	
1929	59	37	73	100
1930	52	30	65	100
1931	52	26	55	100
1932	57	28	55	101
1933	62	34	65	104
1934	67	39	69	103
1935	61	38	67	102
1936	58	35	62	102
1937	60	37	67	100
1938	61	37	65	100
1939	59	36	64	100
1940	56	34	60	99
1941	56	36	61	98
1942	56	39	64	94
1943	54	43	68	85
1944	58	46	71	80
1945	55	45	68	78

Source: Computed from data in U. S. Dept. of Agriculture, *Agricultural Statistics*, 1945, pp. 439-441; *The Cotton Situation*, Sept. 1946, pp. 19-20; U. S. Dept. of Commerce, *Survey of Current Business*, Aug. 1946, p. 16.

factors that governed the changes in the number of persons on farms. It was the condition of the economy generally. *Non*agricultural enterprises during the depression period did not provide enough jobs at any price to absorb even all of the *non*agricultural workers who wanted to work. To many persons, the alternative to remaining on the farm or to returning to it was to receive no income at all.

Increasing activity in the nonagricultural economy presents job opportunities to southern farmers. Consequently, during the periods when this takes place, migration from southern farms occurs, even though southern agricultural income may be increasing relatively to incomes from other occupations. It is the greater migration from southern farms rather than the increase in cash returns to agriculture that explains the relative rather than the absolute improvement during the war years. The proportion that cash farm income in the southeastern states made up of the total United States cash farm income has remained little changed from year to year.[13]

Though the action of the business cycle is important in explaining why free prices cannot be relied upon entirely to correct maladjustments, there are many other things limiting the application of such a theory. One factor has been the lack of industrial opportunities in the South even during periods of relative prosperity. Greater industrialization in the region itself rather than in other regions should encourage the necessary migration from the farm since costs of transfer would be reduced. Unless it can be assumed, however, that units of labor in southern agriculture are homogeneous in character and of a quality required by industry, the relatively greater rewards in industry compared with agriculture may not bring about the required adjustments even though industrial openings are available.

If at one time a man with less than a fifth grade education was considered by the Army to be functionally illiterate for the purpose of fighting, it may likewise be assumed also that a worker with the same educational limitations would be functionally illiterate for any but the lowest type of industrial work. In one state in the Southeast, the median year of school completed was less than

[13] The per cent that cash farm income plus government payments in the Southeast made up of the United States total for the years 1932 through 1945 is listed below:

1932	16.8	1936	18.8	1941	17.5
1933	17.9	1937	19.3	1942	17.6
1934	21.0	1938	19.9	1943	17.7
1935	19.4	1939	18.9	1944	18.6
		1940	17.4	1945	18.2

Realized net income to farm operators includes (1) receipts from farm products sold, (2) value of farm products consumed, and (3) annual rental less production expenses. Realized net income of farm operators and government payments in the Southeast was 8.9 per cent of total U. S. realized net income in 1939. In 1940 the figure was 7.7 per cent; 1941, 7.4 per cent; 1942, 7.3 per cent; 1943, 12.9 per cent; 1944, 14.3 per cent; 1945, 11.8 per cent. Source of data: U.S. Dept. of Agriculture. See also, Solomon Shapiro, "Income in the South," *Monthly Labor Review*, Oct. 1946, pp. 500–501.

4.5 for all farm persons 25 years old or over. In only one state in the Southeast did this figure exceed the seventh grade. The median for Negroes ranged from 2.8 to 5.2. The lack of education is a bar in many cases to entrance into industry as much as are racial barriers. Not only does the lack of education limit transfer of these workers to nonagricultural occupations, but it also limits the transfer from existing types of agricultural work to other types of farming.[14] Free prices alone do not alter such conditions.

If there are factors limiting the effectiveness of the price system in adjusting the use of southern labor most efficiently, there are also factors limiting the effectiveness of prices in changing the type of production. Shifting from the production of cotton to general and livestock farming is advocated and would be expected if the prices of those products were favorable relative to the price of cotton. This shift has taken place in some sections of the region. In the black belt of Alabama, for example, there has been a trend away from cotton toward livestock for several years.[15] For the Southeast as a whole, however, the proportion of cash income accounted for by income from livestock and livestock products has not risen greatly since 1929. In many cases this is explained by the quality of the land itself, which is not adaptable to such production, or by the ownership pattern, which prevents the required consolidation of small units. The same conditions are said to prevent both the transfer to the production of other crops and a shift to extensive rather than intensive types of cultivation.[16]

Increased mechanization is forecast by some as a result of an expected decline in the price of cotton. Farmers, it is contended, will be able and indeed forced to resort to such low-cost methods. Mechanization seems to have reached the point where at present prices it is cheaper for some operations than are hand methods.[17] Mechanization seems to be stimulated, however, by the decline in the number of farm laborers available and the increase in wage rates rather than by low prices. Also, since it involves large capital expenditure, prospects for low cotton prices may limit such expenditures if at the same time the present labor supply continues to be available. In addition, the topography of all portions of the region is not adapted to this type of cotton farming. Mechanization will undoubtedly create many problems, but it will not solve the prob-

[14] Some of the relationships between southern education and economic progress are discussed by the author in "Education as an Investment in Sixth District Economic Progress," *Monthly Review*, Federal Reserve Bank of Atlanta, Sept. 30, 1946, pp. 93–97.

[15] Jones, *op. cit.*, pp. 345–349.

[16] *Ibid.*

[17] Experiments being conducted this year promise to provide much more evidence as to the feasibility and economic use of the mechanical cotton picker. Frank J. Welch and D. Gray Miley of the Mississippi Agricultural Experiment Station reached the conclusion on the basis of experiments that "there is evidence that the key to the successful mechanical harvesting of cotton production is closer to reality today than ever before." Relatively complete shift to mechanized operation would mean a shrinkage of 55 to 65 per cent in the farm population of the plantation area and about as much in other areas. "Mechanization of the Cotton Harvest," *Journal of Farm Economics*, Nov. 1945, pp. 945–946.

lem of too many people on too little land, nor is it likely to be stimulated more by low prices of cotton than by high prices.

III

The foregoing discussion of some of the factors limiting adjustments toward a desirable evolution in southern agriculture through the action of the price system is not exhaustive. It is merely illustrative. Omitted has been a discussion of ownership patterns, of tenancy, of Southern agricultural credit policies, social problems, income distribution, racial factors, and other conditions that are barriers to adjustments and are not created through the action of prices.

Yet many of the limitations to a price-controlled solution are also inherent in the governmental solutions. The AAA legislation was originally conceived, according to J. D. Black, as a plan to assure balanced abundance rather than being intended to reduce total agricultural output.[18] Without reducing output it was intended to shift production out of surplus crops and to bring about a balance from year to year. Soon, however, the idea of bringing about parity prices for agricultural products became predominant, with such things as soil conservation payments considered only as a source of added income to farmers. The stabilization of prices by reducing the fluctuations in the quantity marketed from year to year was the original purpose of commodity loans. They soon became an instrument to be used in raising prices over a period of years.[19] The methods used to assure adequate production during the war are now likely to be used in an attempt to insure high prices during the postwar period.

The price system, however, is the only guide we have that tells whether too much or too little of an agricultural commodity is being produced. Maintaining prices above those that would be set in the market is undoubtedly one way that causes farmers to produce more of many commodities than should be produced and is also one way of helping in further freezing existing relationships.

The weakness of a program of price support alone as a tool in solving the agricultural problem is recognized by agricultural economists. In the contest conducted by the American Farm Economics Association in an effort to discover "a price policy for agriculture consistent with economic progress that will promote adequate and more stable income from farming," there was almost unanimous agreement among the successful contestants that price parity in its present form was inadequate.[20] Other criticisms of parity prices are frequently made. Parity income has become much more popular than parity price.

The price system would be used, according to many of these economists, only as a guide to what should be done to maintain that parity of income.

[18] "Professor Schultz and C.E.D. on Agricultural Policy in 1945," *Journal of Farm Economics*, Aug. 1946, p. 675.

[19] Shepherd, *op. cit.*, p. 40.

[20] W. H. Nichols and D. Gale Johnson, "The Farm Price Policy Awards, 1945," *Journal of Farm Economics*, Feb. 1946, p. 269. The papers themselves were published in the *Journal of Farm Economics*, Aug. 1945.

Fourteen of the 18 contestants would allow prices to behave as free market prices should. Stability of income would be obtained by other means. Free prices would be relied upon to bring about the production of no greater quantity of agricultural products than that for which there is effective demand at full employment. Forward pricing programs are, however, to be resorted to in an effort to guide production.[21]

Plans for assuring stability of income, or a forward pricing program may, however, do little more in bringing about a desirable economic evolution for southern agriculture than have other programs in the past. If artificially high prices have been one of the things that have decreased the mobility of southern agricultural resources by acting indirectly upon incomes, assurance of stability of incomes directly will do even more perhaps to freeze existing relationships. Furthermore, forward pricing programs are quite likely to follow the pattern of other agricultural programs. Through political pressures, these programs may be transformed into price support programs.

It is through such price support programs that federal aids and subsidies are likely to be least beneficial to southern agriculture. It is not only that they prevent the operation of the adjustments through the price system, but they also take attention from the basic adjustments required. The type of federal aids and subsidies to southern agriculture that offer the most hope toward leading to a desirable evolution are those that will be used in a program designed to remove some of the barriers to proper adjustment. Such a program would include (1) raising the general educational level in the region; (2) making credit available either through existing financial institutions or others that will facilitate transfer from production of surplus crops to other types of farming or that will increase the capital-land ratio; (3) assistance in improving methods of productivity and guidance in production; (4) provision of job opportunities through full employment and increased southern industrialization. Federal funds to forward such programs are just as much subsidies to southern agriculture as are direct government payments.

Primary emphasis upon such a program would in itself involve expenditures of funds equal to, or more than, the amounts now being spent. Additional expenditures will be required to alleviate the burdens imposed on individuals by reason of the necessary adjustments. Such a program might involve some method of price support or income subsidy, but it should not be given primary emphasis. The possible effect of government aids and subsidies on the economic evolution of southern agriculture should be assessed by the directness of its approach in overcoming basic barriers to adjustment.

[21] K. T. Wright, "Basic Weaknesses of the Parity Price Formula for a Period of Extensive Adjustments in Agriculture," *Journal of Farm Economics*, Feb. 1946, pp. 294–300; Committee on Parity Concepts, "Outline of a Price Policy for American Agriculture for the Postwar Period," and W. H. Nichols, in the same issue; G. B. Shepherd, "A Rational System of Agriculture Prices and Income Controls," *Journal of Farm Economics*, Aug. 1946, p. 757.

There is a limit to the amount of federal funds the South can expect to continue to receive. If emphasis upon a program directed toward adjustments through price is paramount, expenditures designed to correct the basic maladjustments are likely to suffer. Price problems in the immediate future are likely to be very great. There is a danger, therefore, that the program of federal aids and subsidies will continue to be a price support program. The required adjustments may consequently be limited.

BOOK REVIEWS

Can Science Save Us? By George A. Lundberg. New York: Longmans, Green and Co., 1947. Pp. 122. Cloth, $1.75; paper, $1.00.

These essays, previously printed in semipopular magazines, present in outline the author's vision of the scientific utopia to be realized when the social sciences have been so perfected and so universally accepted that they can give reliable answers for the solution of social problems. The style is clear and smoothly flowing, with many a resounding phrase and many quotable sentences. The book is a challenge and a dogmatic statement of faith rather than a dispassionate and judicial argument of the pros and cons of the issues broached. The more glowing passages give one a picture of a modern John the Baptist calling the world to the one and only road to sure salvation, while hurling scorn, defiance, and derision at all disbelievers.

However, neither the message nor the vision is new. Both can be found in the writings of the eighteenth century rationalists; they have reappeared in varying form and substance in positivist literature since August Comte. Lundberg has given a certain freshness to the discussion by his observations on the needed reforms in education, on international organization and on the relation of science to the arts and the spiritual life. Here and there one meets some very clever rapier thrusts and spitballs, as likely as not having little bearing on the basic issues of his central theme.

Among the main contentions are: 1) the physical and social sciences are alike in method and potentiality of development; 2) the social sciences need not worry about "motives" and "values"; they can study both objectively; they cannot set up a scheme of social values, but have as their sole function the determination of how to achieve any social end efficiently and economically; 3) education should stress scientific method and make devotion to it the unifying principle in teaching; 4) the advance of science will not stifle artistic and religious satisfactions, but will enhance them by grounding them in realities; 5) science will continue to advance for some centuries regardless of social revolutions; it has flourished under various social orders and is not dependent on democaratic values; in any case, the social scientist need not worry about the great ideological controversies of our time because social science seeks only how to make any social order more effective in achieving its primary ends.

Such a brief statement is necessarily somewhat unfair, but the book is too small for so large an order. Even one disposed to share some of the basic postulates of the author will find it thin, sometimes contradictory, and sometimes even sophistical. There is actually more faith than demonstration; more assertion than proof. One must remember, however, that the purpose of the book is apparently to arouse discussion and provoke thought rather than settle issues.

One cannot discuss the issues raised in a review, but one or two points should be mentioned. There is nothing here about social causation; hence there is no chart of how we are to get to the scientific utopia. The author in several ef-

fective passages pays his respects to those who solve social problems by mere words, oratory, or wishes. He holds that propagation of an "idea" "without scientific knowledge of how to achieve concrete goals is pure sophistry" (pp. 110–111). A few pages later (p. 114), after pointing out that we solved our problems of physical existence by putting our faith in the physical sciences, he says: "Once we have made up our minds to do likewise regarding our social predicaments, the path before us is clear." Is it really? How does this differ from the solution of the minister who says "Love thy neighbor," or the statesman who solves Europe's misery by saying, "All we need to do is unite"? Merely making up one's mind does not bring under control those vast forces that determine the course of social evolution. His solution of the problem of international peace is of the same type. He asks us (p. 6) merely to wait until we have a perfected social science that also has won such prestige that its findings will be accepted. How do we get to that stage? How do we achieve those concrete goals? Under the implications of scientific determinism has the author here said anything more than that we shall have peace when the good time comes when we have peace?

One final point. The author argues (p. 98) that men of all times and places show remarkable agreement "upon the *principal* ends of human striving" (italics his). If true, then this is a scientific generalization based on checked observations. Thus science can tell us what principal ends men wish to achieve. It being the sole function of science to tell us how to get what we want, science should be able to tell us, therefore, whether these principal wants can be better attained under a democratic, a totalitarian, or other type of social order. In that case we cannot be indifferent to the great ideological issues of our time. In that case, few will feel that science, especially the social sciences, do, would, or could flourish equally well under any type of social organization. One readily recalls what happened to all social sciences under the Nazis, along with a well established tradition of academic freedom. Would the sole function of the social sciences in a Nazi world be to find ways to make Nazi aims more efficient? Or would it, if it dared, take up the question whether the universal wants of men can be as fully satisfied under such a regime as under some other?

University of Pennsylvania FRANK H. HANKINS

Konkurrenz und Planwirtschaft: Beiträge zur theoretischen Nationalökonomie. By Alfred Amonn. Berne: Francke, 1946. Pp. 240. Sw. fr. 19.

This symposium by Professor Alfred Amonn and a group of younger Swiss scholars represents a substantial and valuable contribution to the literature on modern economic theory.

In this period of confusion, disruption, and decline in world civilization, it is especially gratifying to see that the authors were able to obtain and exploit the most representative theoretical contributions of recent years, by American, English, French, Scandinavian, Dutch, and German scholars. The German speaking world outside of Switzerland, to which for some time to come much of the original material used in this work will not be accessible, should be partic-

ularly grateful for this competent survey of recent progress in the field of international economic theory.

The series starts off with a classically clear and concise presentation of the social-economic problem of value and price and general economic equilibrium and a discussion of a rational price policy based on the theory of free competition by Professor Amonn.

Next in line follows a detailed exposition of the model of pure and perfect competition and general economic equilibrium by Professor Jöhr. Professor Jöhr, in fact, goes beyond this and includes in his discussion some observations on the place and the limitations of pure theory in the work of the modern economist. Sallies into problems of social philosophy, economics of welfare, and economic policy are interspersed with, and sometimes not very sharply set off from, the exposition of pure theory. While this seems to jeopardize sometimes the cogency and the clarity of the presentation somewhat, it serves on the other hand a useful purpose in bringing to mind the limitations of the practical importance of pure theory and also in pointing out the proper way in utilizing its findings with regard to concrete problems. It ought to be stated, however, that Professor Jöhr's philosophical approach, with his emphasis on the character of economics as an ethical science, seems somewhat out of tune in a volume on pure theory which could be very well based on a concept of economics as the science of the best methods of providing for human wants whatever their nature and their desirability. In fact, Professor Jöhr in one place actually accepts this definition.

The following contribution deals with market forms and market relations in line with the theories of Chamberlin, Joan Robinson, Stackelberg, and Triffin. This paper by Dr. Küng is essentially confined to an exposition of such market forms as oligopoly and monopolistic competition, and touches only slightly on the practical consequences and problems which arrive with such market constellations. Dr. Küng's proposition to consider the differences in value of the same goods at various points of time as a phenomenon of product differentiation does not seem to be very fortunate.

The following paper on competition in the model of a dynamic economy, by Dr. Hans Boehi, is particularly interesting. It defines as dynamic economy and as the theory of dynamic economy such theorizing as takes into account the time element and the variation in the times required for various economic elements to adjust to disturbances. While this concept leaves out Professor Schumpeter's theory of economic dynamics and merely accepts it as an explanation for disturbances but not as a way of explaining their impact on the economic system, it nevertheless offers interesting theoretical contributions within this limitation. It elaborates particularly on recent work by Frisch, Lundberg, Lange, Tinbergen, and others.

After this follows a tentative essay ("Ansatz zu") for a universal theory of economic dynamics, largely in mathematical terms, by H. Duetschler, which might be of considerable interest to specialists in pure theory. A weakness in this paper and in some of those following seems to be a vacillation between high

abstraction and occasional claims for the practical usefulness of the theorems in the solutions of concrete problems. These claims are not self-evident and not supported by convincing argument, and seem somewhat uncalled for in an exposition of pure theory. Many ideas in this paper are based on the work of Lord Keynes in his theory of unemployment.

The rest of the work is given over to contributions on the theory of planned economy. As such, the authors consider a government-managed economy, whether the government manages production or distribution outright, or whether it closely controls and orders the management of private owners and of their corporations and their associations.

The article by Emil J. Walters on the system of planned economy is less a purely theoretical than a morphological study. In his system the socialistic planned economy appears as the last link in the historical row of systems which starts with slave economy and develops over medieval feudal economy, local handicraft production, commerical capitalism, industrial capitalism, and monopoly capitalism to this end. At the same time it appears as the systematic antithesis to the capitalistic economy. The author focuses all his attention on one type of socialism, namely that in which the managers attempt, by method of trial and error, to adjust the arrangement of productive factors to consumer preferences. For this type of economy it is indeed true that a rational control on the basis of costs and price comparisons is possible. The types of socialism practically so prevalent in which the managers do not try to honor consumer preferences, but force their concepts of the social good on the national household, are not considered.

The next paper, by H. G. Bieri, presents a very competent discussion of the possibility of economic accounting in that type of socialistic economy which Dr. Walters described before him. The exposition follows on the whole the work by Oscar Lange and Taylor.

The last essay is by Professor Bongras and is written in French. It tries to discuss what he calls directed economy, *economie dirigée*, which he contrasts with the previously discussed planned economy. He seems to understand by his term what in the United States has come to be known as balanced or compensated economy. His discussion is not very satisfactory, particularly because he misses the point from which the two can be clearly separated, namely, the emphasis on immediate control of production, prices, and distribution on the one hand, and indirect control of private business through fiscal policies, manipulation of laws, and the like.

On the whole it is not surprising that the earlier group of papers, which discuss essentially static theory and particularly the theory of pure and perfect competition, are more satisfactory and give a much more complete account of the theoretical work done in that field than the later ones on dynamic theory and economic planning, where the authors sometimes seem to follow what happens to be the line of their personal interest and special competence. This is, of course, inevitable, given the far more tentative and incomplete status of economic theory in the latter field.

Throughout, however, the work is distinguished by simplicity and lucidity of presentation, without sacrifice of exactness. This is all the more recommendable as the authors carefully avoid what might be called "economese," and use the tools of mathematical presentation also very sparingly and only where it seems difficult to get along with mere verbal logic.

Duke University HERBERT VON BECKERATH

Light Metals Monopoly. By Charlotte F. Muller. New York: Columbia University Press, 1946. Pp. 279. $3.00.

This is the story of aluminum and magnesium, big and little champion respectively of the light metals field and of the monopoly that until recently dominated their production and sale.

It is a very important story, mainly for two reasons. In the first place, in this age of aviation the light metals are of strategic importance out of all proportion to their rather puny stature in weight (about one-fiftieth of that of steel in terms of world output) or bulk (about one-fifteenth of that of steel). In the second place, the Aluminum Company of America together with its foreign affiliates and cartel relations is one of the outstanding examples of monopoly power in the age of modern industrialism. The recent curbing of that power by the government of the United States is one of the most encouraging achievements of democracy in action.

The author wisely refrains from duplicating the work done by Donald H. Wallace in his basic study *Market Control in the Aluminum Industry* and recently brought up to date by Engle, Gregory, and Mossè in *Aluminum—An Industrial Marketing Appraisal*. While these earlier studies (1937 and 1944) go into great details of operating performance, prices, profit margins, production, investment, marketing policies, etc., the present volume focuses on the monopoly aspect, on the way in which this monopoly was created, maintained, defended, and enlarged. It stresses particularly control of water power sites, international cartels, and control of magnesium production.

Not so long ago it was exceedingly difficult to find authentic and impartial data on the light metals industries. Today the reverse is true. Investigations by government agencies have made available such vast amounts of reliable information that the economic analyst is swamped with a plethora of data. To turn this vast mass of information into a simple clear story is a stupendous task requiring extraordinary skill of organization and exposition. The author has made a brave effort to perform this difficult task but can hardly be said to have succeeded all the way.

It is a pity that the author had to close her manuscript just before the grand denouement, so dramatically reported in *Fortune* of May, 1946, which, according to Alcoa's own account (*New York Times*, April 1, 1947), leaves that company with only 43.7 per cent of the alumina-producing facilities in the United States, with 50.6 per cent of the aluminum reduction capacity, and with 48.4 per cent of the sheet-fabricating facilities. To be sure, corresponding figures for North American would tell a different story. And here, as everywhere, imponderables

are of paramount importance. The answer of the court to Alcoa's plea that the monopoly charge be dropped is awaited with interest.

University of Texas ERICH W. ZIMMERMANN

Winston-Salem: An Analysis of City Finances. By Clarence Heer. Winston-Salem: *The Twin City Sentinel.* Pp. 42. No price.

In recent years, students have devoted considerable attention to the financial plight of our larger municipalities, and have outlined in detail the nature of the problems that have developed. To date, the greatest attention has been given the more spectacular developments in great metropolitan areas such as New York, Philadelphia, and Detroit.

Apparently, Professor Heer's excellent study of Winston-Salem was undertaken simply for the purpose of making specific recommendations for that particular city. However, the analysis should prove of general interest to students of municipal finance. First, it is clear that the financial problems faced in Winston-Salem, a city of some 80,000 population in 1940, are essentially the same in kind, if not in degree, as those that prevail in the larger areas. Second, the study suggests some of the newer problems that will be encountered by many rapidly growing municipalities in the postwar era.

Some phases of the situation in Winston-Salem are more or less peculiar to the North Carolina setup. First, the city is subject to a general statutory tax limit of $1.25 per $100, which is rapidly being approached. Second, real estate constitutes only 53 per cent of the city's total assessed valuation, most of the remainder consisting of manufacturers' inventories. Third, a rather high degree of functional consolidation has been effected between Winston-Salem and Forsythe County in such fields as public health, welfare, education, and city-county planning.

In numerous other respects, however, the situation is comparable to that found in many other cities throughout the United States. Due largely to inflation, costs of operation and maintenance have risen steadily since 1942. Because of the trend toward industrialization, a rapid growth in population is expected, which will call for an extensive capital improvement program. However, because of faulty debt management, the city now has a relatively heavy debt ($141 per capita), with debt service charges absorbing one-four of its total expenditures. Furthermore, most of the new property values will probably be located outside the municipal boundaries, and thus beyond the reach of the municipal tax collector.

Various possible methods of handling these problems are analyzed in detail. Long-term capital budgets, special levies for capital improvements, reassessment of real estate, upward adjustment of the assessment ratio, extension of city boundaries, further transfers of functions between county and city, municipal sharing in the state gasoline tax, and a municipal supplement to the state sales tax are among the measures considered. In each case the advantages and limitations of the proposal are clearly stated, and definite recommendations presented.

Although addressed primarily to local citizens, this analysis should be of interest to anyone concerned with municipal finance.

University of Tennessee CHARLES P. WHITE

Kentucky City Finances. By the Bureau of Business Research. Lexington: University of Kentucky and Kentucky Municipal League, 1946. Pp. xii, 275.

This is a study of fiscal problems besetting Kentucky municipalities, which were typical of cities everywhere faced with expanded populations, run-down physical plant, and hamstringing constitutional and charter limitations. It was made by the staff of the Bureau of Business Research of the University of Kentucky at the request of the Kentucky Municipal League and was published with the cooperation of the Bankers Bond Company. It thus constitutes an intelligent joint attack upon these problems by the cities themselves and the specialists from the university staff, utilizing the available services of other state agencies and in cooperation with the leading municipal bond house in the state.

Discovery and analysis of the practical possibilities for greater fiscal freedom for Kentucky's cities was the primary purpose of this investigation. Whether this purpose could be accomplished by better methods of financial management or by uncovering additional revenues necessitated a survey of the facts of municipal finance. Field investigations and questionnaires were used to supplement information from published sources. The findings were summarized for various classes and cities and compared with those in other states. Revealing first-hand comments on civic officials' attitudes gathered during this investigation are summarized under the heading "What the Cities Want" in a provocative first chapter.

The main body of this study (Chapters II–IX) is devoted to a critical appraisal of the financial practices of Kentucky cities in the light of recommended practices and standards developed in other studies and other states. The method followed in this analysis was first to state the best or desirable method and then measure Kentucky city practices against these standards. All aspects of local finance are examined in this way including budgeting, accounting, reporting, purchasing, custody of funds, debt administration, property tax assessment, collection, auditing, and nontax revenues. As might be expected, few Kentucky cities were found to measure up to desirable standards of performance on the majority of these requirements.

This study was not intended to uncover any panacea for the ills of municipalities. Nevertheless, several steps toward the goal indicated above are suggested in a final chapter. These center around improved financial administration, broadening of the revenue base for cities, more state cooperation in property tax administration, and removal of legal impediments to economical government. If the legislature and the cities themselves follow these suggestions, the improvement in Kentucky should give its cities the financial basis to make them the envy of those in every other state.

University of Florida C. H. DONOVAN

Monetary Theory, A Modern Treatment of the Essentials of Money and Banking. By George N. Halm. Second edition. Philadelphia: Blakiston Co., 1946. Pp. xiv, 491. $3.50.

Attention is directed herein to the changes which appear in the second edition of this book, the first edition of which was published in 1942.

Professor Halm expresses the opinion that the intense effort which culminated in the establishment of the International Monetary Fund and the Bank for Reconstruction and Development has added greatly to our understanding of the role which money plays in international economic relations. The revision is apparently designed primarily to reflect this improved understanding and to report the developments in connection with the establishment of the fund and the bank.

The book is now divided into three parts: "The Supply and Value of Money"; "Money and Foreign Exchange"; and "Money, Investment, and Employment." The bulk of the new material is contained in Part II.

After analyzing the advantages and disadvantages of the gold standard mechanism, the conclusion is reached that the "automatic" gold standard mechanism will never return. Since the nations want to avoid both the rigidities of the old-fashioned gold standard mechanism and the dangers of freely fluctuating exchange rates, a compromise is called for based on the concept of an equilibrium rate of exchange.

In contrast to the gold standard, a system of managed flexibility can function only under some sort of conscious cooperation among the monetary authorities of the various nations.

International monetary warfare would not only destroy multilateral trade but also have most injurious repercussions upon domestic economic activity. Two chapters are devoted to an elaboration of this point: Chapter 14, "Pathology of International Payments," illustrates some of the consequences we shall have to face if we fail to establish a multilateral payments system, and chapter 15 discusses the system set up pursuant to the Bretton Woods Agreements.

The last chapter has been strengthened by the addition of sections dealing with the full employment budget and the transition period.

Southwestern at Memphis RALPH C. HON

Principles of Economics. By Ralph H. Blodgett. Revised edition. New York: Rinehart & Co., 1946. Pp. xvi, 668. $4.00.

Undergraduate students who enroll in a course on principles of economics usually receive the advice (fortified by a venerated prerequisite requirement) that here is *the* introductory course in economics. I find nothing sacramental about such a procedural stipulation. It is, therefore, with regret that I do not yield to a temptation to review this textbook in connection with a review of the case against requiring a course on principles of economics or on principles and problems as prerequisite to courses on special fields of economics. The temptation is strong because Mr. Blodgett's textbook is worth a trial by those who must, under the dictates of fate, faith, or fancy, teach courses on principles of economics

to introductory students, many of whom will want no more work on economics after the final examinations. Blodgett's exposition, designed for "any average student who can achieve a moderate level of sustained effort," is well organized, lucidly written, and competently presented—and basic tables accompany most of the graphs. Thus, if introductory students *must* begin with a course on principles of economics, use of this textbook may, compared with some of the others, permit more intensive cultivation of beneficiaries of the dosage and, as well, more extensive stimulation of interest beyond final examinations.

This is a textbook presenting basic information on economic concepts, economic systems, production principles and organization, costs of production, value (fundamentally, pricing of commodities), distribution (fundamentally, pricing of productive services and productive resources), and exchange. Mr. Blodgett emphasizes the applicability of the logic of economic relations to decision-making under various economic systems; but he deals principally with the structure and functions of the economic system of the United States. Although this is an exposition of principles of economics, the author does not entirely neglect institutions and problems connected with money and banking, international trade, public finance, labor organization, economic instability, and wartime economy.

Mr Blodgett incorporates in his textbook numerous statements of concept entirely in line with those in many other textbooks on principles of economics. In questioning a few of these statements, I suggest an appraisal of alternatives on the basis of Blodgett's criteria of simplicity and accuracy, with recognition that a textbook represents some compromise between the two. Thus, why rest the definition of capital goods and the consequent analysis of both goods and values upon the concept of produced wealth which assists in further production, rather than upon the concept of sources, other than labor, of prospective services? Why describe as a first approximation the characteristics of production in terms of historical construction of productive capacity (roundabout or time-consuming emergence of productive capacity), rather than in terms of going productive capacity (simultaneous production and consumption involving continuous allocation of resources to maintain outputs of consumers' goods and services and to maintain outputs of equipment for sustaining productive capacity)?

In distinguishing between statements of the principle of diminishing productivity in terms of average returns and in terms of marginal returns, why prefer the statement in terms of average returns, rather than the statement in terms of marginal returns, especially since the latter is directly related to demand for a productive service, involves concepts of marginal quantities and determination of a maximum (which usually require extraordinary emphasis), and may be interpreted with appropriate explanation of the economically significant portion of the marginal return curve? Why interpret demand, supply, revenue, and cost schedules as hypothetical illustrations of actual conditions, rather than as hypothetical illustrations of subjective guess or estimate of (sometimes optional) possibilities? Why interpret the so-called laws of price as statements of tendency under actual conditions, rather than as statements of subjective guess or estimate concerning direction of movement?

Why, by the way, discuss "economics as a science" in the first chapter, rather than in the last chapter?

Grinnell College JAMES H. STAUSS

Current Economic Problems. By Paul F. Gemmill and Ralph H. Blodgett. Third edition. New York: Harper and Bros., 1947. Pp.viii, 760. $4.00.

This is not a text in the principles of economics in the traditional sense but, as the authors frankly admit, is "an exposition of urgent economic problems" and attempts to show what the problems are and what can be done about them; not what must be done or what should be done. The approach, therefore, seems a negative one and such expressions as "economic insecurity and inequality," "waste in production and consumption," and "obstacles to international trade" are pointed up. Marginal productivity of labor gives way to trade unionism and labor legislation, and oligopsonistic control of industry, to problems of waste in production, for example.

The main emphasis is on "analysis and evaluation, rather than upon history and facts." Perhaps too little consideration is given to the historical framework in which each problem arose. The general outlook is world-wide, and much space is devoted to a clear, understandable, and sympathetic discussion of socialism and communism. Those selecting a problem-study book of this kind as a text, however, must keep in mind the end sought in the use of the book and the maturity or lack of maturity of the reader.

The authors seem to have done well what they set out to do. In keeping with the spirit of the age, they leave one with a feeling of uncertainty, bordering on bewilderment, as to what to do and which way to turn. Their work, nevertheless, shows both zeal and unquestionable scholarship.

University of Alabama GEORGE B. CORRIE
Birmingham Division

Price-Quantity Interactions in Business Cycles. By Frederick C. Mills. New York: National Bureau of Economic Research, 1946. Pp. xii, 140. $1.50.

The behavior during the 9 stages of the reference cycle of 64 pairs of price and quantity series, classified into 11 overlapping groups, is examined in this volume. The measurements used to describe the average behavior of the 64 commodities as a whole, and of the 11 groups are as follows: (1) clinical standings during reference cycle stages; (2) amplitude (from trough to peak to trough); (3) variability (sum of squares of deviations from mean); (4) elasticity of quantity and flexibility of price; (5) average monthly interstage percentage change; (6) per cent of value (price × quantity) series with cyclical tide, by stages; (7) acceleration in per cent of commodities showing increase in buyers' outlay; (8) per cent of movements with (or against) cyclical tide in which price (or quantity) is dominant. The findings are summarized under 30 points (or 44 points if subheadings are counted separately).

Professor Mills is cautious about making inferences concerning cause and effect relationships, but the reviewer retains in his mind the following picture

of the business cycle. In the last stage of contraction (IX) of the reference cycle, production of domestic crop products, foods, nondurable goods, and consumer goods increases. Thus, "rising demand for consumer goods and increasing revenue of farmers may play important roles in checking contraction and initiating recovery" (p. 114). The commodities that initiate recovery are those that cannot be expanded rapidly for very long and fairly soon the expansion of buyers' outlay is attributable mostly to price increase. In the early part of the reference cycle expansion, metals, durable goods, and capital equipment take over the main responsibility for continued expansion of buyers' outlay. Increase in quantity rather than price of these commodities is the important factor. After stage II, expansion proceeds at a less rapid rate for a short time. There is a check to the expansion of quantities, particularly in the list of commodities which began to expand in stage IX. As the end of prosperity approaches, a large proportion of foods and consumer goods show a tendency to turn downward. Although the transition from contraction to expansion is gradual, with different series moving in different directions, there is considerably more uniformity after stage V, which is the peak of prosperity.

The reviewer has several reservations concerning the study. The author is cognizant of all or most of them, and discusses most of them, and others not mentioned here, rather briefly. (1) The different series averaged together start at different points of time. Some cover the entire period 1858–1938. There is substantially complete coverage since 1919. (2) There is a question whether the reference cycles of different dates are governed by sets of causes sufficiently alike to justify being averaged together. (3) The movements studied include effects (and causes) of cycles as well as those of secular trends. The fact that businessmen do not generally distinguish between secular trend and business cycle may not be sufficient justification for failure to allow for secular trend in making measurements. The author is forced repeatedly to modify his conclusions (to an unknown extent) because the presence of secular trend beclouds the issue. (4) The author uses the term elasticity of demand to mean the ratio of relative change in quantity to relative change in price. (The formula he gives is $e = x/y \cdot dy/dx$, but he appears to use the formula $e = \bar{x}/\bar{y} \cdot \Delta y/\Delta x$.) This is a composite measure which lumps together the effects of the slope and shape, and the shift in position, of the supply schedule and the demand schedule. It would be quite a task to isolate these separate factors, but one is always likely to misinterpret a measurement of this type, particularly when it is referred to by a word with a different customary connotation. It would at least be a good idea to record the measurement in such a way that a negative change in quantity accompanying a positive change in price could be distinquished from a positive change in quantity accompanying a negative change in price. (5) In spite of the extensive measurements presented, the reviewer would like one more set: the percentage of commodities showing increases in prices and increases in quantities, from stage to stage, by groups.

There is much food for thought in this statistical capsule. No serious student of business cycles should overlook it.

University of North Carolina DUDLEY J. COWDEN

The Structure of Transcontinental Railroad Rates. By Stuart Daggett and John P. Carter. Berkeley: University of California Press, 1947. Pp. ix, 165. $4.00.

The eccentricities of freight rate structures are nowhere more extreme than in the tariffs that apply to shipments from and into the Pacific Coast states. Here, for example, one may find instances in which identical rates are charged from California to Arizona and to Georgia, or lower rates are charged from California to Illinois than to Colorado. Here, too, one may find a bewildering variety of routing restrictions, minimum carload weight requirements, ambiguous and overlapping commodity descriptions, and fine-print warnings that specific published rates "ain't necessarily so."

The monograph under review is primarily a systematic description of a sampling of railroad rates that apply to shipments originating and terminating in California. The textual presentation is clarified by skillfully designed tables, charts, and maps. Bibliographical material has been held to a minimum. The extensive references to rail rate tariffs that would be necessary fully to document this study probably would be confusing rather than helpful to most readers, but references are also lacking to the works of other analysts of the transportation problem.

The authors offer numerous hypotheses to explain the peculiarities of the rates that they describe, but they specifically disclaim any attempt to appraise the effect of the transcontinental rate system upon the western economy as a whole. They promise future publication of a more comprehensive study, in which questions of economic welfare presumably will be more thoroughly examined.

Economists would surely welcome elaborations by Professor Daggett and his associates of some of the problems of policy that are only hinted at in this study. The influence of freight rates on regional economic development, the appropriate relationship between carrier costs and rates, the application of the theory of imperfect competition to transportation prices, the extent to which rates based on competition between markets may promote or interfere with the optimum development of the national economy, the elasticity of demand for transportation, the influence of different rate systems on carriers' prosperity, the effect of carrier competition on rates—these and equally complex questions are merely mentioned in passing throughout the present monograph. Obviously no one will ever write a definitive study embracing all these topics, but the "teasers" in the present volume stimulate a hope that the projected larger study will be a milestone in the literature on transportation problems.

The present work suggests many questions that it does not attempt to answer; nevertheless, as a purely descriptive analysis (which is all that its authors claim it to be) it is reasonably complete in itself, and it can be read with profit by all serious students of the American transportation problem.

Washington, D. C. HAROLD KELSO

Regional Shifts in the Postwar Traffic of Class I Railways. By the Bureau of Transport Economics and Statistics of the Interstate Commerce Commission. Two volumes. Washington: Interstate Commerce Commission, 1946. Pp. (Vol. I) xxxi, 261; (Vol. II) 149.

This study, published in two volumes and prepared under the direction of Spurgeon Bell by Julian Duncan and H. S. Cannell, is one of a series dealing with transportation in the postwar period. Volume I contains the body of the report; Volume II, the appendixes. Among the other studies that have been issued are *Postwar Traffic Levels*, *Postwar Earnings of Class I Railroads*, and *War-built Pipe Lines and the Postwar Transportation of Petroleum.*

The major purpose of this latest investigation is to estimate, in terms of tons originated, the probable distribution of railway traffic during the period 1946–1948 among the freight rate territories of the United States: Official, Southern, Western Trunk Line, Southwestern, and Mountain Pacific. Emphasis is upon the expected changes in the territorial distribution of traffic rather than upon the absolute amount of shipping. In forecasting changes an attempt is made to evaluate the effects of long-time trends and of war developments.

Space does not permit a full explanation of the bases and methods of forecasting, but it appears that the estimates have been formulated with care. Prewar changes in the location of industry are indicated first, as measured by the value of factory products and by the value added through manufacture during the long period 1849–1939 and during the shorter war, postwar, and prewar periods, 1909–1919, 1919–1929, and 1929–1939. These figures were computed because of the reasonably close correspondence between them (when deflated) and the volume of traffic. It is concluded that the manufacture of both durable and non-durable goods in Official territory has declined relative to Southern, Southwestern, and Mountain Pacific territories, particularly the last two, and that World War I accentuated these trends.

After long-time trends in manufacturing have been indicated, the distribution of war facilities is analyzed. The territorial additions during World War II to plant investments in 1939 are computed, and the probable conversions to peacetime production are estimated on the basis of factory ownership, location, and other factors of convertibility, such as industrial skills, professional training, electric power, capital accumulation, and population changes. Forecasts are made for manufacturing industries as a group and for iron and steel, nonferrous metals, chemicals, machinery, petroleum, and coal. It is suggested that Mountain Pacific and Southwestern territories may gain more from World War II than the other territories. However, the highest portion of expansion of existing plants was in Official territory; such plants are most likely to continue in operation; and the future expansion there is more certain than in the West.

The analysis of the expansion and conversion of war facilities is supplemented by an examination of traffic flows within and between the territories in 1939, 1942, and 1944, as shown by waybill samples. Important findings from this examination are that increasing industrialization tends to produce an increase in

the total volume of traffic originated, and that intraterritorial traffic is likely to grow faster than interterritorial. From this it follows that Southern territory will gain from the class rate decision relative to Official, in so far as that decision stimulates manufacturing in the South.

The final section of this study forecasts the territorial distribution of postwar traffic by commodity groups: manufactures and miscellaneous, products of mines, products of agriculture, products of forests, and animals and their products. Forecasts are made by computing probable national totals on the basis of income, production, and population, and by distributing these totals according to the territorial percentages of tons originated during the years from 1937 through 1944. The trends thus projected are adjusted in the case of manufacturing and mining by making allowances for the information derived from the analysis of prewar tendencies and of war facilities.

Important general conclusions from this investigation are as follows: Official territory will experience a declining percentage of total tons originated in the early postwar years and will lose more to the other territories as a result of the war than would be expected from the normal trend. Southwestern and Mountain Pacific territories will gain most. Southern territory will lose to the last two in so far as war developments are concerned, but will fare better on the basis of the more indicative regular trend. Official territory will hold relatively more of the total carload traffic than of the traffic in manufactures and miscellaneous commodities. The chief gain in carload traffic will occur in Southwestern territory. Western Trunk Line territory will also gain. Southern territory will barely maintain its prewar rank in the carload business.

Although this study does not lead to especially startling conclusions, and is based largely upon trends during a fairly short period, it furnishes data and statistical procedures that should prove useful in the adjustment of transportation rates and in other capacities. The Bureau of Transport Economics and Statistics appears to be contributing substantially to the body of knowledge on transportation.

University of Florida TRUMAN C. BIGHAM

Money and Banking. Edited by Major B. Foster and Raymond Rodgers. Third edition. New York: Prentice-Hall, 1947. Pp. xvi, 634. Trade, $5.65; text, $4.25.

The third edition of Foster and Rodgers' *Money and Banking* has the same virtues and defects, as a textbook, as the second edition. Written in a clear and interesting style, one-fifth of the book—six chapters—is concerned with money and monetary standards, the value of money, credit control, and foreign exchange. To this reviewer, an attempt to discuss money, credit, and prices in an 18-page chapter, using only the transactions approach, cannot be satisfactory. Credit control is covered in 15 pages; the Bretton Woods agreements are not mentioned. In the four-fifths of the book devoted to banking, the description of commercial banking practices (12 chapters) is probably the best in any intro-

ductory text. The Federal Reserve System merits one chapter, noncommercial banking six chapters, and foreign banking systems four chapters. The principal changes in this third edition are additions to the chapters on foreign banking systems, particularly that of England. Surprisingly little is said of the significance of our war financing policies to American money and banking policies and problems. Throughout the book, however, not only has tabular material been revised to as late as the middle of 1946 in many cases, but the legislative and administrative changes of recent years have been incorporated in the text.

University of Florida HARWOOD B. DOLBEARE

Money and Banking. By Raymond P. Kent. New York: Rinehart and Co., 1947. Pp. xiii, 702. $5.00.

The subject matter of money and banking has changed with respect to emphasis and inclusion of new material during the last decade so that the environment within which principles enunciated by old-line theorists operate has become more important than the principles themselves. Professor Kent of the University of Notre Dame, despite an effort to attain "reasonable balance," has produced an excellent textbook which stresses the milieu of monetary and banking theory and correctly so in the opinion of the reviewer. Four phenomena are stressed by Kent: the effects of particular monetary standards, the role of commercial banks as money-creating institutions, the role of the Federal Reserve authorities in controlling the volume of meney, and the fiscal operations of the federal government. The multiplication of federal banking facilities as well as changes in private banking facilities may very well force consideration of revision of pedagogical materials and methods in the field of money and banking.

Kent's main methodological virtue is to synthesize various plans of monetary theory where divergent and to eschew separate treatment of conflicting theories to avoid confusion. No pet theses are peddled so that, considering the content material of organization, operations, and legislation which are covered, the total effect, though not so much in form, tends to be descriptive and somewhat encyclopaedic. The simplicity achieved for beginning students may be more apparent than real. Every teacher using the textbook will be compelled to develop his own bibliographical materials to satisfy the critical student as well as to devise means to stimulate student interest since no uniform effort is made to cite the literature on controversial issues. Documentation of the text in connection with the many references made to current legislation would have been helpful to both the student and teacher.

Some specific comments may be made. The style of Part I on Money is defective because of a number of parenthetical observations that tend to become irritating, i.e., numerous references to "the critics," "the statesmen," "the proponents," etc., without footnotes. The frequent reference to "the rules of the game" is ambiguous. It is doubted if reference is intended to Von Neumann and Morgenstern's *Theory of Games and Economic Behavior*. Chapter 6 on Banking and Credit appears illogically placed in Part I on Money. In connection with

drafts, bills of exchange, foreign exchange instruments, etc., actual examples of such instruments would have constituted good visual aids in subject matter that naturally tends to be as dry as dust.

Since in general the coverage is adequate and evidences a remarkable degree of accuracy and detail not only in the field of money and banking but also in such other fields as corporation finance, personal finance, investments, law and accounting, at the risk of appearing captious, the reviewer questions certain omissions. The quantity theory of money is not mentioned explicitly except as one of the determinants of the transactions theory. Footnote 7, page 392, justifies the dropping of the designation due to the endless controversy occasioned. B. M. Anderson's work is not mentioned, incidentally. Another lapse appears to be the failure to refer to chapter VII of Kemmerer's *Gold and the Gold Standard* (1944) which draws up as fair a balance sheet of the gold standard controversy as is available to the general reader. The origins of Gresham's law and of clearing houses have always served to catch the students' interest, in the reviewer's experience. There is a paucity of historical accounts of experiences of nations other than the United States. The history of bimetallism and fiat moneys of other nations is both profitable and interesting. The recent nationalization of the Bank of England is only referred to in passing. There is an inadequate treatment of GI financing, a subject which could well be expanded for student-centered material. Chapter 37 on Banking Institutions in the Capital Market is misleading in not giving the divided and undivided syndicate plans for underwriters' liabilities, and omits completely any reference to the Public Utility Holding Company Act of 1935 as well as the Trust Indenture Act of 1939.

The presentation of comparative tables taken from the Federal Reserve Bulletin is a good way of reducing to a glance what in some textbooks occasions considerable additional research. Further, Kent's materials are up to date, which raises the question of loose-leaf format publication in lieu of a bound volume. A good teacher with a functional approach can use Professor Kent's textbook to good advantage. If another edition is planned, a glossary of terms would be especially helpful to the student, considering the wide range of subject matter.

University of Denver ORBA F. TRAYLOR

Economic Research and the Development of Economic Science and Public Policy. Twelve papers presented at the Twenty-fifth Anniversary Meeting of the National Bureau of Economic Research. New York: National Bureau of Economic Research, 1946. Pp. x, 198. $1.00.

Contributors to this third volume of the National Bureau's Twenty-fifth Anniversary Series are W. C. Mitchell, Alexander Loveday, H. G. Moulton, E. A. Goldenweiser, Per Jacobson, Charles Rist, R. B. Warren, Lewis Douglas, John Jewkes, Jan Tinbergen, R. H. Coats, and Joseph S. Davis. Topics vary widely; about the only unifying bond is a common concern with economic research and economic policy.

To this reviewer, Mitchell's, Warren's, and Jewkes' papers are by far the most stimulating. No one of the three can be said to break new ground. Mitchell,

for instance, merely considers what "will be demanded from" economists and what economists themselves "wish to supply"; Warren summarizes the relationship of monetary theory and policy to monetary and general economic development since 1907; and Jewkes organizes doubts which have frequently been expressed concerning the usefulness of "Keynesian analysis" as a guide to economic policy in the postwar period and as a means of planning future governmental action at any time. The restatements, however, are well expressed and challengingly presented and probably serve as well as possible the purposes of such meetings as that which led to the publication of this volume.

One matter of possible interest is the frequency of references to the late Lord Keynes and the differing nature of the criticisms offered. Professor Jewkes' remarks have already been mentioned. A similar statement concerning the inapplicability of "Keynesian theory" to postwar France is found in Rist's paper; Moulton criticizes Keynes' belief in the efficacy of the long-term interest rate; and Mitchell remarks concerning the oversimplified psychological assumptions underlying the "propensity to consume."

University of North Carolina HENRY OLIVER

Human Factors in Management. By Schuyler Dean Hoslett. Parkville, Missouri: Park College Press, 1946. Pp. 322. $4.00.

This is another study in what may be called industrial sociology. The work group, such as the employees collectively of a particular company, is regarded as a social group, or a society, having its individual characteristics and a distinct personality. The study seeks to understand, as the author says, why people in organized work groups act the way they do under stated conditions. It does not depreciate the work done in industrial psychology, anthropology, economics, or other related fields, rather it attempts to synthesize the work done in these fields.

One characteristic of this book is that it does not offer a single panacea for our industrial relations problem, nor does it attempt to blame anyone for what is wrong. Emphasis throughout is upon bringing into focus in the same study all aspects of, and all approaches to, the human relations problem of a particular work group. An understanding of the formal organization with its various functions and lines of authority as depicted on an organization chart is important, but of equal importance is an understanding of the informal organization of the workers based upon their various relationships with one another and with their natural leaders both in the plant and in the community. Likewise, company personalities may be as important as company policies; the feelings of the workers, as the logic of the situation; and their general beliefs, as the specific facts in the case. The way things are done is often much more important to the workers than what is done. An equitable solution of the main economic problems, wages and security, is sometimes not enough; the worker wants to know what is going on, he wants to express himself, he wants his ego pacified. The solution to the whole problem lies, therefore, in properly evaluating each

of the many aspects, or factors, and preventing a deficiency in any one becoming so serious as to offset all the other good aspects of the situation.

The latter portion of the study reviews some of the well-known techniques for locating and evaluating the deficiencies in the human organization, such as the poll or questionnaire, the interview, personnel counseling, employee participation, and various methods of psychological analysis. Emphasis here is upon finding out the trouble, not so much upon remedial policies, for once the weak spot is known the remedy is often obvious. However, there is one precaution: in correcting one evil, care must be exercised to see that another is not created or that another favorable factor is not negated. Balance must be maintained among all factors so that the social group continues to cohere and function effectively.

The author of this volume is mainly an editor, since 18 different papers from different authors—many of them quite well known—constitute almost the entire book. He has done an excellent job, however, in selecting and arranging the separate contributions to provide a degree of continuity and logical development not often found in books written by many authors.

University of Alabama E. H. Anderson

The Social System of the Modern Factory. By W. Lloyd Warner and J. O. Low. New Haven: Yale University Press, 1947. Pp. 245. $3.00.

The book under review is the fourth in a series of six volumes known as the "Yankee City Series." This particular study had as its central purpose to gather material that would enable the authors to give an accurate description of the evolution in the social organization of the modern factory. As a starting point they selected for study an old New England community known as Yankee City. The majority of the citizens of this community had long been dependent upon manufacturing for a livlihood. First the workers built clipper ships and when that industry declined with the passing of the clipper ship, textile mills moved in to make use of the surplus labor. Later the textile plants gradually moved away and shoe factories came to control the economy and to fashion the lives of the people of the community.

This very interestingly written little book is developed around a general strike which started in the seven shoe factories of Yankee City on March 10, 1933, and continued for four weeks. First the authors give a detailed account of the strike during all of its phases of development and conclusion. At first the workers did not belong to a union but in four weeks the union had complete control of the situation. The remainder of the book is devoted to a discussion of the factors which over the years led to a worker solidarity that enabled the union to organize the plants in a short period of time.

The authors found that a number of factors combined to cause the shoe workers of Yankee City to quit work as a group and later join the union. In the first place, the extensive use of the division of labor and the complete mechanization in the industry broke the skill hiearchy in shoemaking. The operatives in the shoe factories were employed in low skilled jobs while all high skilled jobs had

been removed to the research departments of allied industries. The machine destroyed the craftsmanship of the shoe worker and reduced him to simple machine tender at low wages. The introduction of the machine also made it possible to use more women in the shoe industry and women's wages were lower than those of men. A third factor that led to greater worker solidarity was the loss of local control of the shoe factories in Yankee City. The vertical extension of the managerial hierarchy and the social distance between the top executives who lived in New York or elsewhere and the workers and the community had increased to the point where the bonds of mutual friendship had virtually disappeared.

The authors believe their research furnished adequate evidence to support the hypothesis that workers are losing status as a group. In their careful study of the industry they found that shoe operatives were blocked in their opportunity to obtain more lucrative jobs and jobs of higher status in the factory. Commenting on the status of the working class generally, they state, "The emergence of an industrial working class seems, therefore, to be derived from the increase of the subordination of industrial workers by the division of labor and the demands of business efficiency with its consequent blockage of upward mobility in the factory system. On the other hand, the increase of the solidarity of this working class or working groups suggests that its members believe that only by some form of collective effort can they combat their subordination and be given a chance to get ahead."

The concluding chapter deals with what the authors call the "Blue Print of Tomorrow." They believe that the destruction of the skill hierarchy is not peculiar to Yankee City; it is characteristic of changing conditions in American industry generally. As in Yankee City, American workers as a group are joining unions for the same reasons as the shoe workers in Yankee City. In time powerful worker hierarchies will develop until they become a match for the great corporate hierarchies. Since the interests of the two opposing forces will be in opposition, a third party will have to act as referee. Since the church has lost its great power as a regulator, the government will find it necessary to accept the responsibility of acting as referee and to apply sanctions with sufficient force to maintain moderate collaboration between the two for the good of all the people.

The book contains little that is new to students of the labor movement and industrial organization but its excellent style and vivid presentation will make it stimulating reading for anyone interested in one of the major problems of the present social and industrial order.

University of Virginia GEORGE T. STARNES

Économie et Législation industrielles. By Robert Mossé. Paris, France: Aubier, 1940. Pp. 402. Paper, Fr. f. 35.

This is a little book with a broad approach to political economy, law, and institutions of labor in prewar France. It has more of interest to postwar America than the 1940 Paris publication date first suggests. One is struck by the multitude of similarities of French, and other European, labor law and in-

stitutions with those of the United States, Germany not excepted. However, little comment is made on the perversion of labor law and institutions to unique ends by the Nazi state. Soviet labor is barely mentioned.

Because of a lag in our labor thought and institutions behind those of European countries, the intervention of war and time is not particularly noticeable to the American reader of this book. The two chapters covering unions, collective bargaining, industrial conflicts, and state intervention make particularly interesting reading. For instance, the discussion of the imposition, by decree of the Ministry of Labor, of provisions of collective bargaining contracts of a majority upon a dissenting minority of an industry (nation-wide or district-wide) seems ahead of our current controversy over the size of the proper collective bargaining unit.

The covering of his subject in a short space requires much summarization. Most of this is excellent, as is a 29-page review of ideas and institutions of labor from the Greeks to the present. Occasionally, however, kaleidoscopic treatment is weak, as in limiting examples of incentive wage payment plans to Taylor's differential piece rate, which leaves the impression, despite a page of good summarization of the general nature of incentive wage plans, that such schemes are all similar in detail to the one discussed.

On wage theory the author devotes over 30 pages to successive rebuttals of the classical theory of a natural wage, the wage fund theory, the Marxists, and the "pure" marginal utility analysis, winding up with the perfection of "La Théorie Marginaliste Perfectionnée," which states that the supply of labor as well as the demand for labor are curvilinear with respect to price, "the effective wage being fixed at the point of intersection of the two curves where marginal productivity equals marginal sacrifice" and that "the equilibrium wage, or optimum wage, is not necessarily the one which permits full employment."

An interesting chapter deals with social and legal problems of contracts of employment; another discusses unemployment. The final chapter covers social insurance. Incidentally, the reviewer did not find in the facts or in the analysis presented by Professor Mossé any indication that the fall of France could be traced to her labor legislation or labor policy.

University of North Carolina ROBERT Y. DURAND

Guaranteed Annual Wages. By Jack Chernick and George C. Hellickson. Minneapolis: University of Minnesota Press, 1945. Pp. 146. $2.50.

During the next 10 to 15 years American industry will have to demonstrate its ability to provide security for each citizen without too great an expense in freedom. College professors; local, state, and federal employees; and many salaried workers in industry are paid on an annual basis. Can other groups enjoy the same security?

The unions, speaking for the less secure workers, are making the guaranteed annual wage their next major demand. If this problem is to be solved with a minimum of industrial strife, the public and industry will do well to prepare themselves to know the issues. The background for this is given in an easily

readable style in the book being reviewed. Mr. Chernick is an economist at the University of Manitoba and formerly of the University of Minnesota, and Mr. Hellickson is a member of the Minneapolis *Star-Journal*.

Shoes, soap, meat, and building are the four industries which the authors discuss in terms of an annual wage. The Nunn-Bush Shoe Company uses a flexible wage system which provides that 20 per cent of the wholesale volume of goods produced is paid into a salary fund from which covered employees are paid 52 salary checks. After Proctor and Gamble eliminated seasonal sales fluctuations of soap in 1923, that company has successfully guaranteed 40 hours work for 48 weeks to all employees with two years' service. At the Geo. A. Hormel Company weekly hours fluctuate from 16 to 56 because of the raw material problem, but the company pays 52 equal pay checks a year, and in addition the employees receive a profit-sharing bonus. Hormel includes in its reasons for the success of the plan the cooperation of the CIO local.

In order to demonstrate the problems of instituting an annual wage plan, the authors apply the idea to the building industry, for if a plan works here, not only would it eliminate much of the seasonal production within the trade; but also, since building stimulates so many other industries, it could materially reduce the cyclical element in the economy. Weather is held to be by no means the deterrent to stabilized operations that building contractors frequently insist it is. The unwillingness of employees to accept a lower hourly rate in order to get a higher guaranteed annual income may well be the major obstacle to an annual wage in the industry. The biggest single problem that the yearly wage presents is the necessity for a cycle-sensitive business to commit itself a year in advance on the cost of its direct labor, with the consequent loss of flexibility.

This book is a fair and interesting appraisal of this proposal and will help the public, the employer, and the union leader to understand the issues involved.

Dartmouth College RICHARD O. EYMANN

Principles of Marketing. By Harold H. Maynard and Theodore N. Beckman. Fourth edition. New York: Ronald Press Co., 1946. Pp. xiv, 736. $5.00.

Large class enrollments, heavy teaching loads, and the general inadequacy of library facilities and reference materials make the use of a comprehensive and up-to-date principles text a prime necessity in beginning marketing courses. The publication at this time of a revised edition of the well-known Maynard, Weidler, and Beckman text will therefore be welcomed by marketing teachers.

Professors Maynard and Beckman, under whose names the new edition appears, have wisely retained substantially the same organization of subject matter used in the previous edition. Within this general framework, however, they have made a number of improvements. Certain chapters have been shifted to other sections of the book, the order of topics has been rearranged in a number of instances, and several chapters have been rewritten almost in their entirety. Among these improvements, the following should be mentioned: (1) the chapter on cooperative marketing of agricultural products has been shifted to the wholesaling section and that on consumers' cooperation to the retailing section; (2)

consumers' attitudes are discussed in the chapter on consumer buying motives; (3) the chapter on supermarkets has been eliminated and these markets are discussed in the chapter on voluntary chains; (4) a separate chapter has been written on the smaller independent retail store; and (5) a third chapter has been added to the section on pricing. A much improved book results from these changes and additions, as well as from the rewriting of much of the subject matter.

Variations in personal and regional interests, and the differences in university marketing curriculums make it impossible to include in one text all topics which many teachers might wish to consider in the principles course. Moreover, the inclusion of even the minimum number of topics which must be considered if the text is to have extensive use precludes discussion of these topics in the detail desired by many persons. For example, the authors conclude that the extension of governmental price control "is a distinct possibility," yet they give only one page to the discussion of this topic as such. The wartime price controls receive little attention, inadequate discussion being given of the major problems involved and of the principles underlying the control methods adopted. Likewise, trade associations and interstate trade barriers, both of which exercise important influence on marketing practices, costs, and efficiency, are not given direct consideration; in fact, neither of these terms is included in the index. Although these topics, as well as others, are omitted or are not treated as fully as many would desire, the topics included are treated more objectively and more critically, in general, than in the previous editions.

A new feature of the text is the inclusion of a list of questions and short problems at the end of each chapter. These are well selected, and, for the most part, are well stated. It appears, however, that the addition of these materials made it necessary to omit the specific chapter references which appeared in the earlier edition. Numerous sources are cited in footnotes, however, and a selected bibliography, classified under seven general headings, is presented at the end of the book.

The previous edition of this text was one of the most teachable books in the field. The new edition will be found to be even more adaptable to classroom use, for the subject matter is better balanced, the materials are better organized, and the treatment is more critical and analytical.

University of North Carolina C. H. McGregor

Advanced Accounting. By Roy B. Kester. Fourth edition. New York: Ronald Press Co., 1946. Pp. x, 796. $5.00.

The current edition represents an almost complete rewriting and revision of the third edition, issued in 1933. Although the earlier edition contains more pages, the format of the current book provides much more material per page.

It appears to be the purpose of the author to present a book that will be useful for an intermediate course in an accounting curriculum. Where a college has such an arrangement, this work would be very useful as a second-year theory course and the author suggests that a third-year book is in process. It seems necessary that there should be a third-year course dealing with the more practical

aspects of accounting. For those colleges without a third-year course, the book needs more illustrations and less text material. It is my opinion that it will be very difficult to get second-year accounting students to read and absorb the first four chapters.

The author has been very thorough in covering his material and it is doubtful that a more complete discussion of the various topics can be found in any other book. Recent developments in accounting have been covered.

There have been many changes in the arrangement of the material of the text. The problems formerly printed in a separate booklet have now been included in the text and cover the last 93 pages. Five chapters of the old edition dealing with branch, liquidation, and estate accounting have been eliminated, presumably to be included in the proposed new book. New materials appear in many parts of the book, especially in the earlier chapters. The chapters dealing with consolidations are better than similar sections of the former edition. Mr. Kester's handling of the depreciation phase of accounting has always been complete and in the current volume his discussion, while shortened, has not lost any of its importance.

The many references to ". . . the author's *Principles of Accounting*" become tiresome.

I believe that the vast majority of the teachers of accounting will agree with the author when he states in the preface that the accounting profession must awaken to the necessity of training in the same way that other professions have met their training problems through "professional schools which can be carried on with a single objective—and not, as at present, through schools of business which are called upon to serve many objectives."

Duke University MARTIN L. BLACK, JR.

Production Credit for Southern Cotton Growers. By A. E. Nielsen. New York: King's Crown Press, 1946. Pp. ix, 194. $2.50.

To the students of farm credit Mr. Nielsen's treatment presents nothing new. The credit problems of the cotton farmer remain unsolved. "A small number of cotton growers at the upper and lower extremes of the credit scale have been provided with government-. . .credit . . . " (p. 172), but the bulk of these farmers must pay through their individual noses for their credit. Since the author nowhere states how he calculated the cost of credit, it is difficult to determine just what these costs are. It is apparent that the data presented are taken from previous studies in which, no doubt, various methods have been used in calculating costs. For this reason it is impossible to know whether or not the costs are correct, in the first instance, and certainly impossible to compare costs from region to region. It would have been helpful, therefore, if the author had presented his method or scheme of study and had attempted to harmonize divergent points of view and the results of various credit studies.

On the whole, this book adds little or nothing to our knowledge of credit among southern farmers. The author apparently is content to echo the old and somewhat antiquated shibboleths about credit problems. "Since," he says, "the

problem of credit is . . . one of ability to pay" (p. 172), he concludes, in effect, that the solution of the credit problems must wait until the farmers' income is sufficient to pay cash instead of using credit. But it is difficult to understand how income can ever be high enough to pay 30 per cent or more for time credit and as high as 13.5 per cent or more for cash credit. To assume that prices of cotton and the efficiency of the southern cotton producer could ever be great enough to accomplish such a feat is to require more credulity on the part of the reader than is ordinarily customary in such studies.

North Carolina State College of the University of North Carolina

G. W. Forster

New Farm Homes for Old. By Rupert B. Vance and Gordon W. Blackwell. University: University of Alabama Press, 1946. Pp. 245. $3.00.

This able study reveals the deplorable housing situation in the rural South. "In terms of value," say the authors, "the farm house of the South is worth on the average about three-fifths of that for the nation, and Negro housing is worth from a third to a half that of white housing." To correct this situation and "to bring rural housing to minimum requirements set for farm houses, it is estimated would require over five billion dollars in materials and labor at 1940 prices" (pp. 7–8). These and other data presented in this book indicate the failure of southern farming to compete in the struggle for existence. The fact is that our southern agriculture is decadent and there is no better index of this than the condition of its rural homes.

To stem the tide of rural decay, the federal government has undertaken a number of projects, among which was a housing program. It is this program which the authors describe and they present the results which have been achieved. The data presented are largely, though not solely, confined to the experience in four counties involving 385 housing units. These counties were Lonoke County, Arkansas; Thomas, Georgia; Lee, Mississippi; and Darlington, South Carolina. All of the important aspects of these programs have been studied by the authors and the results ably reported under such chapter headings as "Who Gets Housed?" "Mobility, Occupation, and Income," "The Farmer Looks At His House," or what the farmer thinks of his new home, "Occupant's Participation in the Program," "The Problem of Maintenance," "Effects on Health and Initiative," and "Social Participation."

There are also two chapters on "Administration and Public Policy" in which are described the local housing authority in action and a peek into the future. Detailed data, excerpts from the United States Housing Act of 1937, methodology and schedules used are presented in a series of four appendixes.

It can be said, although the authors do not present a general summary, that this "experimental" project was a success. As to the future, the authors do not make any predictions, they are content, oddly enough, to state: "Our field study of rural public housing has convinced us that policy and administrative changes can be made that will greatly improve the program when [and if] it is resumed . . . ." This statement is followed by a number of recommendations as to how the project should be administered in the future.

This is a mild ending to a red hot subject. It would have been advisable, at least from where the reviewer stands, to use an atomic bomb to blow the South out of its evident complacency over its damnable housing situation. In the event that the authors ever make another study of this subject, and I hope they will, this reviewer will gladly supply them with a stimulating summary.

North Carolina State College of the University of North Carolina

G. W. FORSTER

The Social Effects of Aviation. By William Fielding Ogburn. Boston: Houghton Mifflin Co., 1946. Pp. vi, 755. $5.00.

In the introductory part is presented the primary objectives of the book, which are to study and to anticipate the probable impacts of aviation upon the daily lives of individuals, social organizations, and customs. In addition there is a discussion of the significance of technology and the limitations surrounding predictions in the field of the social sciences. The underlying theory is that there is a time sequence between an invention and its social effects, and that an understanding of the nature and the functions of an invention should permit predictions, with some degree of accuracy, regarding the social changes which will follow.

In aviation there are certain technological factors such as speed, weight, and power that have fairly well-defined trends which appear to permit extrapolation with some degree of reliability for at least a decade or so. This should give some indication of the broad general changes to come and of their probable impacts upon social institutions.

Part II treats, in a brief but adequate manner, of the *uses* of aviation. Consideration is given to air passenger, mail, and cargo traffic, landing places, flying services, private flying, air routes, and international travel.

The following estimates are illustrative of what may be expected during the postwar era. Air passenger traffic may, during the first postwar decade, reach a level of about 6,000,000,000 to 8,000,000,000 passenger miles at rates ranging from 3.5 to 4 cents a mile. All domestic first class mail going over 400 miles and all foreign first class mail may be carried by air in the postwar decade. Between 75,000,000 and 100,000,000 ton-miles of air cargo may be moved annually at rates as low as 30 to 40 cents per ton-mile or even lower in all cargo planes within five or six years after the war.

Air services will experience great expansion. At the time of the writing of the book, there were only 288 certificated airline stops in the United States, whereas it was estimated that 2400 were needed to give adequate service to the entire population. Air services in the international field may expand to the extent of carrying from 650,000 to 1,000,000 passengers at rates as low as 3 to 3.5 cents per passenger-mile.

The third and final part of the book deals with the social effects of aviation on population, the family, cities, religion, health, recreation, crime, education, railroads, ocean shipping, manufacturing, marketing, mining, real estate, news-

papers, agriculture, forestry, stock-raising, government, public administration, and international relations and policies.

The following predictions are suggestive of some of the future social effects. Aviation is expected to have little influence on the birth rate, but the death rate may be increased by several thousand a year. It is not anticipated that the family will undergo any major changes, although there may be increased separation owing to extended travel. Religion will probably be altered both in its institutional and personal aspects. New problems will be presented in the field of medicine and the dangers from the importation of diseases from foreign countries will be increased. Crime may be extended to large-scale operations, but this may be counteracted to some degree by the increased use of aircraft by the police. The main impact of aviation on education will be through curriculums, with scarcely a subject escaping its influence. The already existing trend to shifting of powers and functions of government from local to national centers may be speeded up, thereby accentuating the movement toward centralization of government. The importance of geographical representation in Congress may be decreased and lobbying strengthened. State and local sentiments and loyalties may meet increasing competition from national issues and interests. In international affairs, the effect of aviation may be to accelerate the evolution of states into larger units and may even eventually facilitate the formation of a single world political organization.

In the reviewer's opinion, the book meets an important need in that it presents an extensive treatment of the social potentialities of this new invention—aircraft—thereby offsetting to some degree the dangers inherent in thinking too exclusively in terms of technological developments and failing to comprehend their social implications.

An extensive bibliography is included, giving references to books, addresses, monographs, pamphlets, and magazine articles in the field of aviation.

University of North Carolina J. C. D. Blaine

The Money Value of a Man. By Louis I. Dublin and Alfred J. Lotka. Revised edition. New York: Ronald Press Co., 1946. Pp. xvii, 214. $6.00.

In 1930 the authors presented a scholarly inquiry into the problem of how much money value could be attached to the human life. Limiting their study to the value of a man to his dependents, Dublin and Lotka frankly avoided the admittedly impossible task of measuring the sentimental and esthetic values of a human being.

The present edition is a complete revision of the earlier work, made necessary by material changes in certain basic factors bearing on the money value of a man. Not only has a declining rate of interest necessitated a recomputation of the discounted value of future earnings; a reduction in mortality has increased the length of the average productive period of the American wage earner.

In addition to the necessary recomputations, the revised edition includes three new chapters based on entirely new material. "The American Family" presents pertinent facts regarding the composition, formation, and disruption of American families. The authors, in discussing the money value of a man to

his dependents, properly assume the family to be the normal unit in dependence on the breadwinner. A discussion of the characteristics of these dependents is, therefore, quite relevant to the study of the breadwinner's value. The second new chapter discusses "Income in Relation to Age and Economic Status" and provides some of the basic data used in the estimation of future earnings of a wage earner. The other new chapter, "Social Insurance," indicated the extent to which public agencies have recognized the money value of a man to his dependents.

Aside from these changes and additions, the book follows the pattern of the first edition. Man is compared to capital such as industrial machinery, giving rise to costs during the construction or developmental period with no earnings to offset the incurred costs. Until a child enters the productive period of his life (assumed to begin at 18 years of age), he is dependent on others for meeting the cost of being born, food, clothing, shelter, education, medical care, recreation, and sundries. It is estimated that a family with three children, with an annual income of $2,500 and with 1935–1936 price levels, will incur costs totaling $7,766 in raising a child to age 18. If the family's income is $5,000 to $10,000, the other conditions remaining the same, the cost of bringing up a child to age 18 will be $16,337. Adjustment of these figures for "spoilage" (premature death) and the interest charge on the capital investment increase the total cost to $9,866 for the family with income of $2,500 and $20,785 for the family with $5,000 to $10,000 income. These costs consider only the family's income devoted to the child. No account is made of the value of the mother's services performed in the upbringing of a child.

However, the value of a man is not determined by his "cost." His value is a function of his earnings. Knowing his life expectancy as shown in mortality tables, his prospective earnings as a present member of a given income class, and the percentage of individuals in each occupational class normally employed at given ages, the authors compute the money value of a man to his dependents. Of a group of men at any given age, a certain number will survive and will earn certain sums of money. On the other hand, a certain part of the individual's earnings will be required for his own upkeep. Consequently, the money value of the individual to his dependents is the present value of his future earnings less the present value of living costs for the remainder of his life.

Physical handicaps and disease are discussed as factors impairing the money value of a man. A public health program is, therefore, a sound investment, since the elimination of disease enhances the present value of the earnings of those exposed to preventable diseases.

While suggesting that a wage earner should insure his dependents against the loss of his income by death or disability, the authors admit the practical impossibility of an insurance program involving the amount of premiums necessary for full coverage.

The authors' motive in stressing the need for insurance might be suspected because of their connections with our largest life insurance company. However, it would seem that it is through such an affiliation that it is possible to combine the experience and skill of these two scholars with the resources and opportunity

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provided by the Metropolitan Life Insurance Company. The result of the combination is this interesting and useful report on the money value of a man to his dependents.

Louisiana State University W. MAURICE YOUNG

Research and Regional Welfare. Edited by Robert E. Coker. Foreword by Louis R. Wilson. Chapel Hill, University of North Carolina Press, 1946. Pp. 229. $3.00.

This little book gathers together the principal addresses delivered at a conference on research at the University of North Carolina. It is peculiarly fitting that the oldest state university in the country, and one which has done so much to advance college and university standards in the South, should use the occasion of its 150th anniversary to emphasize the importance of research at this critical period in southern development.

Professor Coker, the editor of the series and the author of the introductory paper on "The Need for Research," has grouped the addresses under seven broad headings. They present a vivid picture of the status of research in various fields and of the opportunity confronting the South, but, like most ceremonial papers, they contain little that is new. There is no occasion in this brief review to do more than list the speakers and their topics.

Under the heading "The Key to the Future," Governor R. Gregg Cherry of North Carolina spoke on "Research for the Commonwealth." President Graham of the University discussed "The Opportunity and Responsibility of Research," while President Wilson Compton of Washington State College, using forestry as an illustration, pointed out "The Usefulness of Useful Knowledge."

Under the heading "Research in the South," Dr. Wilbur A. Lazier, director, Southern Research Institute, vividly documented the role of "Research for Prosperity in the Industrial South." President Raymond R. Paty of the University of Alabama traced "The Development of Southern Research."

Two papers were devoted to research in the field of "Nutrition and Public Health." The speakers were Dr. Russell M. Wilder, Division of Medicine, the Mayo Clinic, and Brig. Gen. James Stevens Simmons.

Professor D. C. Allen of Johns Hopkins University and Professor Avery Craven of the University of Chicago dealt with research in the field of "The Humanities and Social Sciences." Members of the Southern Economic Association will doubtless wonder at the failure to invite a contribution from an economist.

Milton H. Fies, consulting engineer and trustee of the Southern Research Institute and Reuben B. Robertson, executive vice president, Champion Paper and Fibre Company, pointed out the large role which the physical sciences are destined to play in the industrial development of the South. In connection with "The Biological Sciences," Dr. Harden F. Taylor, former president, Atlantic Coast Fisheries Company, drew attention to the potential assets enjoyed by the South because of its enormous coastline and its proximity to an inexhaustible supply of sea fish. President George J. Wilds of Coker's Pedigreed Seed Com-

pany showed what research had meant and still more what it could mean to southern farmers.

Under the heading of "Research, the Foundation of the Future," Brig. Gen. Georges F. Doriot gave details regarding the way in which wartime requirements had advanced technologies that would serve the South in the future.

The papers amply document the assumption underlying the conference that the vigorous prosecution of research can pay large material and spiritual dividends in the way of a more prosperous and more humane South. In view of the grave responsibility which he has recently been appointed to assume, it is interesting and significant to note that David E. Lilienthal's paper on "The Moral Responsibility of Research" was the only one that emphasized the fact that research could destroy as well as build. He urged his listeners not to overlook "the simple but fundamental importance of the purpose of research."

Wabash College JOHN V. VAN SICKLE

The Pattern of Corporate Financial Structure. By Walter A. Chudson. New York: National Bureau of Economic Research, 1945. Pp. xvi, 148. $2.00.

This book is one in the series of Studies in Business Financing published during the past five years by the National Bureau of Economic Research. Its subtitle, "A Cross-Section View of Manufacturing, Mining, Trade, and Construction, 1937," is somewhat more suggestive of its contents than its main title. Essentially the study is limited to the one year, 1937, with occasional comparisons with 1931 data. However, it professes to do no more than give the 1937 picture, leaving the reader to decide whether 1937 conditions are typical and supplying little data on which to make such a decision.

Briefly, the study centers around the question as to what extent the financial structure of industry in 1937 was related to (1) the type of industry, (2) the size of the concern, and (3) the profitability of the concern. To accomplish this purpose, the author relies primarily upon a presentation of numerous balance sheet and balance sheet-income account ratios. The wide variety of ratios are logically grouped and a vast amount of specific information concerning the financial structure of American industry in 1937 can be obtained from the book. Most of the results confirm generally accepted views; but the extent to which these generally accepted views are correct is set forth. The conclusions reached with respect to many of the ratios is negative: that there is no close variation with industry, size, or profitableness found in the ratios.

This is a carefully prepared study. The data used are quite adequate for the purpose and the ratios chosen are appropriate. Yet the book, standing alone, has very limited significance. Just how important is the financial structure of corporations in 1937, even though set forth capably as it is in this book, to the student of business finance or the practitioner, for that matter, unless it can be presumed that 1937 is a "normal" year? As a part of the National Bureau's larger study of business financing it undoubtedly helps give a more complete picture. But alone, it is simply a factual presentation of the financial structure of business in a year for which reasonably abundant data are available.

University of Florida JOHN B. MCFERRIN

STATE REPORTS

ALABAMA

Generally speaking, business activity in Alabama maintained a high level during the first quarter of 1947. The basic industries—cement, coal, coke, cotton, pig iron, and steel—and electric energy consumption for industrial purposes have been running well above the same period of last year. This of course is partly due to the effects of strikes during last year. Employment and payrolls have maintained high levels. Retail sales on a dollar volume basis have been high, but such information as is available indicates that the increase is due to higher prices rather than to great quantities of goods being sold. Imports through Mobile have been high. Savings deposits in the banks, postal savings, and the accounts of building and loan associations continue high with little evidence that savings are being used up for consumption purposes.

Activity generally has been high but there is evidence of considerable uneasiness among merchants, who frequently say that demand is slackening off, that sales are not coming up to expectations, and that it is getting more difficult to keep merchanidise moving.

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Prominent among the subjects receiving attention in Alabama at the beginning of the year were items concerning industrial expansion. The Alabama State Chamber of Commerce issued a statement concerning new plants and the press has carried many news stories. These developments have taken place in many cities and towns of the state and the following listing is not intended to be inclusive.

One development of great interest and probable significance is the cold roll mill of the Tennessee Coal, Iron and Railroad Company, because it will produce a type of thin sheets that may serve to stimulate the fabrication of kinds of finished products that have not been produced in this area in sizeable quantities.

The city of Gadsden has been the site of a number of important projects. The Alabama Power Company will build a $12,000,000 steam auxiliary plant. The Goodyear Tire and Rubber Company has completed a new wing on its building and another addition costing $650,000 is under way. This plant in Gadsden will soon reach a production of 18,000 tires a day. The city of Gadsden also expects to become the owner of the $1,500,000 airport at Camp Sibert. The Republic Steel Corporation has announced that it will spend $200,000 during 1947 modernizing its bar mill in Gadsden.

Alabama's first production of mechanized farm equipment is under way at Anniston. A plant that was formerly engaged in war production has been converted and is now producing cultivators, disc plows, hay rakes, and manure spreaders. The entire output of this plant is being shipped to the J. I. Case Company in Racine, Wisconisn, and the goods are in turn distributed by them from that center. All of the products are tractor-drawn equipment. At

present around 300 workers are employed, but lack of steel is restricting both employment and production.

Eight new industries have been located in Decatur, Alabama, during 1946, and construction work is under way at present on the Wolverine Tube division of the Calumet and Hicla Consolidated Copper Company.

Tuscaloosa also has seen considerable expansion. The entire output from the Alabama oil wells of the Gilbertown area is being channeled and processed through a Tuscaloosa oil refinery, the Placid Oil Company. This refinery has a present capacity of 2,500 barrels daily. The company buys the output from the wells and carries it 16 miles by pipe line to the Tombigbee River. Barges then bring the oil to the Tuscaloosa plant. Analysis of the crude oil shows that it contains about 60 per cent asphalt, lending itself readily for use in making "penetration asphalt and cut-back asphalt." The processes here produce two kinds of asphalt, gasoline, diesel fuel, and other fuels. The B. F. Goodrich Tire and Rubber plant is approaching its capacity production of 6,000 tires and tubes daily. The Gulf States Paper Corporation has planned a $3,000,000 expansion program to increase their production of paper from approximately 200 tons per day to from 300 to 350 tons. The Reichold Chemicals, operators of a phenol plant since 1943, are planning a five-year expansion program which will involve an expenditure of some $5,000,000 in the construction of a chemical color and pigment plant and other additions.

In Greensboro, Alabama, a new overall plant will start operating around March 1. If operations are satisfactory, the company has announced its intention of erecting an addition to the factory to employ 600 people.

The $4,000,000 expansion program of the State Docks, with its increase in berthing facilities for ships and the restoration of part of Mobile's oldest waterfront area, will be Mobile's most important development during 1947. However, Mobile has two rather important new industries. These are the Ideal Cement Company and the paper bag factory of Arkil and Smith.

A number of the small towns in South Alabama also have been announcing new plants. Soap manufacturing plants have been established in Elba and Enterprise. A new rug factory to employ 50 persons has been announced for Brewton, and there is also an announcement of a new meat packing plant and a box factory at Andalusia. There has been considerable expansion in the garment manufacturing industry in South Alabama with new shirt factories at Andalusia, Brewton, Atmore, and Enterprise.

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The revenues of the state of Alabama during 1945–46, exclusive of federal funds and grants, were about $108,000,000. This is considered to be a very high figure, but if collections continue at the rate reported during the first part of the fiscal year 1946–47, it appears that tax collection will amount to some $120,000,000, or an increase of somewhat more than 10 per cent above last year's collection. The following is a summary which compares the collection of taxes during the first half of the fiscal year of 1946–47 with the corresponding period for the year 1945–46.

	OCT. 1, 1945–MARCH 1, 1946	OCT. 1, 1946–MARCH 1, 1947	PER CENT CHANGE
Gasoline tax	$8,204,194	$10,103,380	23.1
Sales tax	8,912,752	10,879,021	22.1
Income tax	2,386,115	3,100,530	29.9
Automobile licenses	3,796,191	4,383,935	15.5
Corporation tax	344,781	362,954	5.3
Use tax	450,572	689,690	53.1
Insurance Co. licenses	419,811	1,339,101	219.0

The only major tax which produced a smaller amount than during the same period a year ago was the tobacco tax.

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On January 20, 1947, James E. Folsom assumed office as governor of the state. He almost immediately announced a comprehensive program which centered largely around increased social security benefits, greater expenditures for education and highways, and a quite extensive building program. He estimated that his program would call for an expenditure of some $51,000,000 a year above present levels and admitted that this would require the raising of a sizeable amount of additional money. He thought, however, that the problems could be met by the "fair and impartial administration of our present revenue laws plus efficient spending of the people's money." The governor also expressed opposition to the big utility and monopoly groups, and to the jurisdiction of the Interstate Commerce Commission over inland waterways. These announcements led to widespread discussion and to the evidence of very considerable opposition. It seems at present that efforts will be centered very largely upon providing relief for education and efforts seem to be directed largely toward submitting an amendment concerning the disposition of the income tax surplus which has accumulated. A similar amendment was submitted to the people by the last legislature but failed to pass. Apparently the new amendment will provide for definite earmarking of all funds for education, although there is some sentiment for including social welfare work as a participant in the division.

The last legislature set up an interim committee to study revenue problems and report to the next governor and legislature. The report presents a comprehensive survey of the revenue problems of the state and its subdivisions, and submits a series of recommendations that constitute an integrated program of revenue reform.

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Indicative of increased activity in housing throughout Alabama is the fact that state officials of the Federal Housing Administration received 3,783 applications for FHA insured home loans in 1946, which totaled $23,000,000. This is the largest dollar volume in any one year in FHA history in Alabama. Approximately 40 per cent of these applications were filed in Jefferson County.

Despite the heavy demand for workers, Alabama residents received three times as much unemployment compensation as ever before during the fiscal year ending September 30, 1946. Payments of $17,903,000 were made to 88,000 individuals, the average weekly benefit amounting to $16.78. Part of this was due to veterans benefits. A release of recent date indicates that in August 1946, 32,000 veterans drew unemployment compensation as against 13,127 in December, and 15,253 in January 1947. In February the number increased to 20,246 and in March stood at 18,550. Thus it would seem that there has been some tapering off from the high of last summer. On the other hand it is estimated that during March more people received unemployment compensation payments than in any of the past five months. The estimated number of recipients was 7,461 in January, 9,568 in February, and 9,650 in March.

That applications are being carefully screened is indicated by the fact that during February more than one-third of the claims for unemployment compensation were rejected outright and among those approved, many were denied the maximum benefits. Of the 7,273 claims reviewed in February, 2,569 or 35 per cent were rejected outright. The reasons given for the denials are as follows: insufficient wage credits, 1,815; inability and unavailability for other jobs, 202; voluntary quitting of their jobs, 552. In addition to those denied all benefits many others had their benefits reduced.

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As was the case in all sections of the country, the return of students to colleges in large numbers created a serious problem in Alabama. The pressure fell largely upon the Alabama Polytechnic Institute at Auburn and the University of Alabama. The total enrollment of the university for the 1945–46 session was 5,715. For the fall quarter of 1946–47 the enrollment jumped to 8,485. The enrollment in the winter and spring quarters decreased slightly, being in the neighborhood of 8,000. Of this enrollment, approximately 5,000 are veterans of World War II. This greatly expanded enrollment caused a heavy demand for additional faculty, for housing, and for classroom space. Gradually the needs are being met by temporary buildings for dormitories and classrooms, by the acquisition of Northington General Hospital and by additional members of the faculty. Several permanent dormitories also are under construction.

University of Alabama H. H. Chapman

GEORGIA

While more than 600 bills, most of them of local application only, were considered by the 1947 session of the Georgia General Assembly, many of the more important measures died in the Senate during the closing days of the session as a result of the conflict over the position of governor. Principal among those that failed to pass were the appropriations bill and a 3 per cent sales tax bill. The appropriations measure, calling for an expenditure of $118,000,000 during the next fiscal year, was passed by the House only 10 days after the session opened, but consideration of it was delayed in the Senate. The 3 per cent sales tax bill,

by which its supporters hoped to raise an additional $28,000,000 in revenue to help to finance the record expenditures, was also passed by the House. The Senate voted to continue it and before it was reconsidered, the Georgia Supreme Court handed down its decision declaring Mr. M. E. Thompson the acting governor of the state. A motion for its reconsideration was then defeated by the Talmadge supporters in the Senate, who previously had championed the measure. Following this, the appropriations bill, with most of Acting Governor Thompson's supporters voting against it, was rejected by the Senate. As a result, the Acting Governor will administer the state's finances under a hold-over proposal calling for the expenditure of approximately $78,000,000. There is still considerable uncertainty concerning the financing of many of the state's services.

More positive action was taken in the field of industrial relations. Georgia joined the growing list of states outlawing the closed shop, and also passed legislation making the check-off system illegal. Unlike similar laws in most other states, the Georgia acts provide for criminal penalties in the form of fines and imprisonment. George L. Googe, southern director of organization for the American Federation of Labor, immediately announced that the A. F. of L. planned to test the new laws in the courts. According to Mr. Googe, the laws are unconstitutional because, among other reasons, they void many existing labor management collective bargaining contracts now in force, thus violating the impairment of contracts provisions of the Georgia constitution.

Emory University ALBERT GRIFFIN

KENTUCKY

O. Henry's charming story, *Supply and Demand*, depicts a sad state of affairs where there was plenty of supply but no demand. Kentucky tobacco growers are wondering if they face a modified version of this predicament as a result of heavy increases in production during the last five years.

There are about 49,000 growers of burley tobacco on 340 to 345 thousand acres of land. In addition there are several thousand others producing dark air-cured and dark fire-cured types on some 70,000 more acres. Last season the gross sales of all types brought nearly $200,000,000 to farmers of the state. This year a quota cut of 19.6 per cent is in force, but allotments of .9 acre or less are undisturbed, making an estimated average reduction of 11 per cent.

During the last 10 years the yield per acre has sharply increased, from 800 pounds to something over 1,200 pounds. Yields of 2,000 pounds per acre are not unusual. The per acre record last season was 3,833 pounds. Further gains are unlikely unless a new type or variety of plant is developed.

Burley from all burley districts reached the record-breaking total of about 600 million pounds in the 1946–47 marketing season. The average price paid was $39.70 per hundred pounds, or 28 cents higher than that for the previous year. However, of this total 148 million pounds went to the Burley Tobacco Growers Co-operative Association, the agency through which the governmental support price is paid. The year before the agency took only 19 million pounds.

The average price paid by the agency was $29.29 in 1946–47 and $29.60 in 1945–46.

With cigarette consumption at about a standstill and with a new tendency away from chewing and smoking grades, growers are uneasy over the heaviness of the market during the last season and the carry-over of tobacco stocks, which, in the case of burley, amounted to about 850 million pounds. If this heavy inventory should depress prices in the coming season the maintenance of parity prices, which undoubtedly will be no lower and very probably will be a bit higher, is likely to saddle the government with the obligation to purchase a still larger percentage of the total output.

What will the government do with all this tobacco? Sale in the foreign market is likely to be difficult. Britain is committed to reduction of imports. Other countries may lack purchasing power. It remains to be seen how long the taxpayer will be saddled with heads-you-win-tails-we-lose price supports. If the sale of tobacco yields an amount greater than the price paid the farmers, the difference is remitted to them. If the sale price is less, the loss is absorbed by the public purse.

The methods of marketing tobacco, though colorful, are crude and expensive. It is high time a more efficient system is devised, one more in keeping with the magnitude and importance of the job to be done.

Kentuckians are in the midst of a campaign to decide the issue of a new constitution. As is usual in such cases, more heat than light is being generated by too much emphasis on points of relatively minor significance. For example, limitation of official salaries to $5,000 annually is pointed out as inequitable and a barrier to retention by public bodies of competent personnel. Little is said about the indirect costs to the taxpayers occasioned by such an over-all limitation, costs of omission and commission, not to mention direct contractual costs (which are exempt) for services that cannot be otherwise obtained.

University of Kentucky RODMAN SULLIVAN

LOUISIANA

Encouraged by strong support and insistent pressure from high school and college groups throughout the state, Governor James H. Davis called a special session of the Louisiana legislature during the month of March. The purposes of the session were to consider bills to increase teachers' salaries and to provide for construction of new buildings and facilities for high schools, state colleges, and the state university.

At the special session, the legislature passed a teachers' pay bill providing for an increase of $2,500,000 in teachers' salaries for the current fiscal year, and an increased wage base of $7,500,000 for next year. In addition to this $10,000,000 appropriation for increased salaries to teachers, other bills appropriating an added $7,392,000 for other projects were passed.

The additional bills included appropriations of $500,000 to public welfare in Louisiana; $4,329,000 for a public school and college building program to be directed by the State Board of Education; $2,000,000 for additions to Louisiana

State University; and $300,000 for free school lunches in Louisiana public schools. Modification of the original call for the special session of the legislature was made by Governor Davis in order to permit the body to enact measures for immediate increases in pay for the current year.

Substantial arguments were advanced during the special session for certain improvements in the educational system of the state. Two suggestions would affect the teacher group itself, while the third was a suggestion to aid the financial structure of the educational system. It was suggested by many people that the teacher retirement system of the state should be strengthened and enlarged, and that an amendment of the teacher tenure law should be adopted to make it easier to replace incompetent teachers. The third suggestion was that a better system of distribution of school money should be devised, as a substitute for the present much-criticised plan.

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As a result of vociferous demands by many legislators, the natural gas policy of the state was changed during the special session of the legislature. The old policy, effective since 1942, had been to prohibit the export of gas outside Louisiana to areas where other fuels were abundant. The repeal of the old resolution effectively removed all controls on the export of gas from the state, except those contained in the regulations of the Conservation Department of the state.

Of interest to conservationists, also, was a recent conference in New Orleans which dealt with the problem of conserving the marine life in Gulf coastal waters. A proposed "Gulf States Fishing Compact" was adopted at the conference, and it will be submitted to the various state legislatures for ratification. It was pointed out in the conference that conservation of marine life off the Mississippi coast alone would not be successful, particularly with Louisiana, Alabama, and Texas following a wholly different course. Emphasis was placed on the fact that the problems of the fisheries, whether they concern oyster, shrimp, red snapper, or other varieties of marine life, are the concern of all the states bordering the Gulf Coast.

Sportsmen of the nation, interested particularly in the conservation of the steadily diminishing numbers of ducks, geese, and other types of wildfowl, met in New Orleans in April for the national convention of "Ducks Unlimited." Since southern Louisiana marshes are favorite grounds for wildfowl, this conference was of particular interest to sportsmen of the state and to other businessmen who have catered to the tourist trade for many years. Various suggestions, including a one-year "moratorium" on shooting of wildfowl, were made. Perhaps the most popular suggestion was the one which would make provision for adequate feeding grounds for wildfowl throughout the Mississippi Valley and into Canada, plus adequate protection against excessive shooting and out-of-season shooting.

Another interesting problem posed by Nature in relation to Louisiana resources was the recent discovery by geologists of definite salt intrusion in the irrigation

wells for rice fields in the southern part of the state. The geologists have made a careful study of the water situation throughout southern Louisiana. They have advanced the information that prolonged use of water wells has caused pressure to develop in the sands, and seepage of salt water from the Gulf of Mexico has been the result. Rice growers have abandoned some of the wells. However, warning has been issued that if salt water is pumped into Louisiana rice fields, the damage to an important agricultural product of the state may amount to millions of dollars.

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Crops in Louisiana were off to a late start in April when it became apparent that excessive rain and cold had retarded and harassed farm work throughout the state. Louisiana farmers had occasion to worry, especially about their vegetable crops, which characteristically are of great importance to the farm economy. One of the state's most famous crops—strawberries—suffered a definite setback because of inclement weather, but in late April was making significant gains. Only 105 carloads of strawberries had been shipped by April 17, however, as compared with 929 cars which had been moved to market by the same time in 1946. Prices were relatively good, with fair demand and a steady market, according to observers.

Outstanding events for Louisiana farmers and for boys and girls in 4-H clubs were the Louisiana Livestock and National Brahman Show and the Junior Livestock Show, both of which were held on the campus of the Louisiana State University in April.

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Two outstanding strikes have highlighted the recent labor relations scene in Louisiana. These strikes were a "milk strike," which occurred in Tangipahoa and Washington parishes, and the telephone workers' strike which resulted in work stoppage throughout most of the state. The milk strike was marked by violence and some shootings and bloodshed, accompanied by the dumping of more than 50,000 gallons of milk into ditches in the parishes mentioned. Incidents arising out of the strike included the stopping of Illinois Central trains and the taking of milk cans off the trains. The Federal Bureau of Investigation was brought into the matter, along with postal authorities, and at least three men were indicted for their actions. The telephone strike was carried on peacefully, and with a minimum of disturbance.

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Louisiana veterans of World War II have expressed themselves as being dissatisfied in regard to two specific problems during recent months. Disposal of surplus property has been a particularly obnoxious chapter in their lives, since governmental red tape and inefficiency have played such a large part in depriving them of surplus war vehicles needed in their businesses. Inability to get any of the thousands of vehicles from a Texas army depot, because the vehicles

were "earmarked" for exclusive sale in the Lone Star State, added fuel to the flames of disgust already enveloping the veterans of Louisiana.

Still another reason for discontent, especially in the state colleges, is the operation of the "fiscal code" of Louisiana. It has been attacked vigorously by veterans' groups on several occasions. A centralized auditing system for state colleges, instead of the present centralized accounting system, has been suggested as one solution to many of the problems connected with veterans' education in these institutions. It has been suggested that an independent system of accounting for each state college, with central auditing control, would be more satisfactory than the present system.

* * * * *

Business conditions in Louisiana during the early part of the year showed a "topping out" tendency, and by the end of February the index of business activity, as reported by the Bureau of Business Research at Louisiana State University, had dropped slightly below the index for the month of January. However, general business levels remained 12.9 per cent above that of February 1946. Increases in prices, as well as an increase in activity, were reflected in the figures released by the bureau in March. One of the most significant "economic gains" registered for the state was the 64.8 per cent drop in unemployment payments.

Louisiana Polytechnic Institute PAUL T. HENDERSHOT

MISSISSIPPI

The Mississippi legislature met in extraordinary session in March. No important legislation of an economic nature resulted from the session, however, which was concerned with a revision of the state's primary laws and with measures for aiding the common schools of the state.

Business activity in Mississippi moved briskly during the early months of 1947, and, of the 16 major trade areas in the state, 15 reflected a greater volume of activity than in the first months of the preceding years. There are some reported series, though, that are not increasing as much as previously and are even beginning to show a decline. For example, the March 1947 sales tax collections reflected a 37 per cent decline as compared to those for February 1946; however, it is very likely that this decline is due to late reporting. The money orders issued, dollar registration collections, and postal receipts, according to business review publications issued by state institutions of higher learning, also showed signs of declining or reflected absolute decreases. On the other hand, by February of 1947 bank debits, the number of telephones in service, the number of electric connections, and the number of gas connections all reflected increases of 10 per cent or more when compared to the same month in 1946. Continued rises in receipts were reported from the timber severance and oil severance taxes.

The Bureau of Public Administration of the University of Mississippi has recently issued a study of the public administration of natural resources in the

state entitled ***Mississippi's Wealth.*** This is part of a regional project in which the Universities of Alabama, Kentucky, North Carolina, South Carolina, and Tennessee are engaged. It is expected that the series of state studies, together with an over-all regional report being prepared by the Tennessee Valley Authority, will provide important regional data on the quantity and availability of natural resources in the southeastern states and their public administration.

University of Mississippi ROBERT B. HIGHSAW

NORTH CAROLINA

In recent months North Carolina has, of course, been enjoying the inflationary boom that has swept the country as a result of the vast amount of money created during the war. Inasmuch as the state had relatively little war industry, the end of hostilities brought no great problems of reconversion. Almost without interruption the textile and tobacco industries have operated at high levels. After experiencing some difficulties with materials and supplies, the furnitue industry has likewise swung into a period of good production.

In practically every economic area employment is high. The trend of wage rates has been upward, many companies having recently granted increases without union pressure. The state has been singularly free from strikes and other evidences of discord between labor and industry. The telephone strike beginning early in April is, of course, an exception to this general statement. At present the unionization program seems to be making little headway in the state. In view of these facts, many friends of labor have expressed disappointment that the state legislature should have enacted in 1947 a law which, unless set aside by the courts, will prohibit the closed shop, the union shop, and maintenance of membership contracts in North Carolina.

Building, both of residences and of industrial and commercial structures, has maintained fairly good levels, although high costs and scarcity of critical materials have prevented the development of an extensive boom.

Among the more significant events from the long-run viewpoint is the continuation of the consolidation movement in the textile industry. While mergers are not occurring as frequently as in 1946, they continue to take place, bringing more and more of the state's factories into large combinations, and often involving the transfer of final control to eastern financial centers. At the moment of writing there is some evidence that the boom in textiles, especially in cotton, may have passed its peak. If this should turn out to be the case, the virtual end of the consolidation period is doubtless at hand.

In April the Civil Aeronautics Board granted a three-year temporary certificate of public convenience and necessity to Piedmont Aviation of Winston-Salem to operate scheduled passenger and mail service by air between North Carolina points and the Ohio River cities of Cincinnati and Louisville. One route extends from New Bern by way of Greensboro and Winston-Salem, another from Wilmington by way of Charlotte. This decision gives promise of affording the people of the state much needed connections with the Middle West.

No economic events of recent months exceed in importance those that have occurred in the field of public finance. The state government has enjoyed and continues to enjoy the largest revenues in its history. Out of previous surpluses provision had already been made for the retirement of the general debt of the state. The 1947 legislature added $9,300,000 to the postwar reserve fund of the state, bringing it to $30,000,000. From the remainder of the current surplus it appropriated $7,000,000 for an immediate bonus to state employees and teachers, and more than $48,000,000 for permanent improvements at state institutions, including provision for an extensive medical care program.

For the biennium beginning July 1, 1947, the legislature adopted a budget calling for expenditures of $191,692,000, a figure considerably in excess of any previous appropriations, owing largely to the fact that it includes provision for increases averaging approximately 30 per cent in the salaries of all public school teachers in the state. Except for minor changes, tax rates were left unaltered. Revenues for the coming biennium are estimated at $186,172,000. The current fiscal period ending July 1, 1947, is expected to show a surplus, in excess of the appropriations made from such surplus and mentioned above, sufficient to cover the anticipated difference of $5,520,000 between revenues and expenditures in 1947–49. Appropriations from the highway fund, which is separately handled, totalled $117,761,000 for the coming biennium.

From the facts just given it is evident that the state government, while enjoying great prosperity at the moment, is largely depending, so far as the future is concerned, upon a continuation of the present swollen revenues. Any considerable change in economic conditions within the state will imperil the program of expenditures already approved or else lead to an active search for new sources of revenue.

In contrast with the state government, local units, which depend largely upon ad valorem taxes, have enjoyed no great increase in revenues; but the cost of local government has risen considerably and heavy pressure is being applied to municipal and county boards to expand the services of government. As a result, local property tax rates are almost everywhere moving sharply upward. This, of course, is a familiar part of the pattern of boom periods. In the event of a decided decline in production, employment, and prices, many local units of government will be faced with grave problems of retrenchment.

Davidson College C. K. Brown

SOUTH CAROLINA

The cost of food in South Carolina has risen more than one-third during the past 12 months and is more than twice as high as before the war. The South Carolina Department of Labor obtains data on retail prices of 66 food items in 10 cities of the state. The 66 items included in the index (specific amounts of each stated) could have been bought for $11.51 in January 1941, $17.40 in January 1946, and $23,97 in January 1947. In other words, the cost of food in January 1947 was 108 per cent above prewar and 38 per cent above the prices of a year ago.

Industrial activity continues at a high rate in South Carolina. The construction industries are employing more people and manufacturing industries are operating at a high level. Consumption of cotton by local mills during the three-month period December–February was 15 per cent greater than during the corresponding period a year earlier. Total nonagricultural employment in the state was estimated by the South Carolina Employment Security Commission at 482,000 in March or about 9 per cent above 1940. Unemployment at the end of February was estimated at 37,780. Unemployment in the five largest areas in the state was estimated as follows: Charleston, 5,800; Columbia, 4,300; Greenville, 3,000; Rock Hill, 2,900; and Spartanburg, 2,800.

Farmers in South Carolina, according to their intentions March 1, 1947, will increase the acreage of principal crops this year. The acreage in wheat is 37 per cent larger than last year and the acreage in other small grain crops is also larger than a year ago. According to their indicated intentions farmers in the state plan to plant larger acreages of peanuts, corn, Irish potatoes, and soybeans and about the same acreage of tobacco as in 1946. Rainy weather during March and April, however, delayed field work and some farmers may not be able to plant as large an acreage as they had intended to plant.

The production of agricultural commodities in South Carolina in 1946 was generally large and prices received were at record or near record highs. Consequently the total cash receipts from sale of farm commodities were about three times the prewar average and were more than twice that of any year between 1923 and 1942 (data not available for earlier years). Cash receipts from the sale of farm commodities by South Carolina farmers totalled $302,000,000 in 1946, as compared with $232,000,000 in 1945 and $94,000,000 in 1941. Cash receipts from the sale of farm commodities generally averaged less than $100,000,000 during the thirties and, in the worst depression year, 1932, amounted to only $50,000,000.

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The legislature has been in session for the past three and a half months but most of their time has been spend in committees and on legislation of a local nature. The general appropriation bill for the fiscal year 1947–48 calls for an expenditure of $94,387,000. This includes the highway department and other state agencies. The revenue for the fiscal year 1947–48 is estimated at $95,994,000. Apparently appropriations for educational purposes will be larger than for the current fiscal year. The present administration is attempting to do away with dual office holding and members of the legislature will not be permitted to serve on boards and commissions created by the legislature as they have in the past. A bill providing for the creation of farmers' markets has been presented to the legislature and is opposed in its present form by some of the state agricultural leaders. Legislation enacted to date has not been of great economic importance.

Farm Credit Administration,
Columbia, S. C.

GLENN R. SMITH

VIRGINIA

The economic life of Virginia will be affected for many years by legislation passed by the extraordinary session of the General Assembly in January, 1947. Of the 80 acts approved by the Governor, 57 had emergency clauses and became effective immediately upon approval. A brief digest is made in this article of those acts which appear to have the most significant impact upon economic conditions in the state.

Of great importance was an act to supplement certain appropriations for school purposes passed by the General Assembly in 1946 which have proved inadequate to meet the need. The total funds appropriated in the act are $7,885,000 for the period ending June 30, 1948. Of this amount approximately $6 million were appropriated for maintenance of public free schools in Virginia, $2,166,000 to be apportioned for the payment of teachers' salaries the first year, and $3,850,000 the second year. The funds are to be distributed to the localities on the basis of "an equal amount for each child in average daily attendance during the preceding school year" provided minimum salary schedules have been made effective in the locality. The law provides that, with certain exceptions, all funds so allocated shall be matched by cities and towns to the extent of 30 per cent of the amounts made available by the state. In addition to the $6 million, an appropriation of $1 million was made for the maintenance of public free schools in the fiscal year 1948 to be apportioned in the same manner, but available for expenditure in "the sole discretion of the Governor" and only in case the funds are available in the General Fund. An appropriation was made to supplement education in counties and cities which are unable to maintain a minimum education program. This fund need not be matched. Thus, by prompt action of the General Assembly a critical emergency in the public school system of the state has been averted.

Of the new labor legislation enacted by the General Assembly one act declares it to be the public policy of the state that the right to work shall not be denied or abridged on account of membership or nonmembership in any labor organization. This act also (1) makes illegal certain agreements between employers and labor organizations requiring union membership as a condition of employment, or under which any labor organization acquires an employment monopoly in any enterprise; (2) provides that union membership shall not be made a condition of employment by any employer, nor shall any employer require any person to abstain from membership in a labor organization; (3) provides that no employer shall require any person to pay dues to any labor organization; and (4) gives persons deprived of employment in violation of certain sections of the act the right to recover damages from the employer. This act applies only to renewals and extensions of existing contracts and to new contracts.

Another act was passed designed to prevent interruptions in the operation of certain public utilities as the result of labor disputes. It specifically declares that while the right to bargain collectively is recognized and reaffirmed, yet it must be subordinated to the health and safety of the citizens of the state. Lockouts, strikes, or work stoppages are declared unlawful unless and until

certain conditions have been complied with, including notice, negotiation, and arbitration if requested by the Governor. If all efforts to avert the strike fail, the governor may take possession of the utility for operation by the state. A picket line "near or adjacent to work by state employees shall be deemed an unlawful obstruction and in violation of the act." The expenses of operating the utility and of training any personnel shall be paid out of state funds, and all revenues from operation shall be paid into the state treasury. Any unauthorized strike or work stoppage in a public utility is punishable by a fine of $10,000 for each day of interruption. The law provides a right of appeal to the Supreme Court of Appeals.

Another act of considerable significance was passed at the extraordinary session. It is known as the Emergency Fair Rent Act and provides for the taking over of rent control in certain areas of the state in the event that the federal act is not extended beyond June 30, 1947. The act will expire July 1, 1948.

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A picture of fiscal well-being for the nine months of the year is reflected in the figures recently released by the State Comptroller. The surplus at the beginning of the fiscal period, July 1, 1946, was $86,697,203, of which approximately $66 million were in investments. Total renenues collected amounted to $182,484,993, distributed approximately $40 million to the General Fund and $138 million to Special Revenue Funds. The state treasury received from all sources during the nine months a total of $293,705,200, distributable as follows: General Fund, $59,386,911, Special Funds, $164,607,714, Reserves for Specified Purposes, $3,334,849, and Investments for General and Special Funds, $66,372,800. Approximately 80 per cent of the state's income was obtained from the following four sources: (1) from taxes, $65 million, including that from the motor vehicle fuel tax; (2) from sales of property and commodities, $63 million, all of which except $500,000 came from the sale of alcoholic liquors; (3) from grants and donations, $25 million, practically all of which were grants by the federal government; and (4) from institutional revenues, $11 million, $4 million of which came from tuition and student fees.

All expenditures and disbursements for the first nine months amounted to $209,316,885. An analysis of the expenditures for this period shows that the major items of expenditure were those of the Alcoholic Beverage Control Board, $53 million; Department of Highways, $36 million; Department of Education, $33 million; Unemployment Compensation Commission, $20 million; and $11 million for Fixed Charges and Current Obligations. These account for more than 60 per cent of the total expenditures of the period.

Thus, a summary of the fiscal operations of the state for the first nine months of the fiscal period indicate a strong financial condition. As of March 31, 1947, total surplus was approximately $84 million, of which about $66 million was in investments. Contrary to certain predictions, Virginia public revenues are flowing into the state treasury at rates well above last year's levels, and business activity is still riding the wave of prosperity.

University of Richmond HERMAN P. THOMAS

PERSONNEL NOTES

Earl Dean Bennett has become assistant professor of accounting at Louisiana Polytechnic Institute.

Paul W. Burnam has been appointed assistant professor of accounting at Southwestern Louisiana Institute.

H. N. Creed has become assistant professor of business administration at Southwestern Louisiana Institute.

Marie Louise Franques has been appointed instructor in secretarial science at Southwestern Louisiana Institute.

A. L. Geisenheimer, formerly professor of economics at the College of Charleston, has joined the staff of the Department of Economics at the University of South Carolina.

Albert Griffin has been appointed secretary of the School of Business Administration at Emory University. In addition to his new duties, he continues as associate professor of business administration.

Paul T. Hendershot has been appointed professor and head of the Department of Economics at Louisiana Polytechnic Institute. He has also become correspondent of *The Southern Economic Journal* for Louisiana.

Byron Hilley is teaching business law at both Emory University and Georgia School of Technology.

John Fred Holly, formerly with Milligan College and the U. S. Department of Labor, has been appointed assistant professor of economics at the University of Tennessee.

MacDonald K. Horne, Jr., has returned to the University of Mississippi as professor and head of the Department of Economics. For the past several years he has served as director of research for the National Cotton Council of America.

E. Carl Jones has become assistant professor of economics at Louisiana Polytechnic Institute.

J. T. Johnson has become associate professor of accounting at Southwestern Louisiana Institute.

A. J. Lawrence, formerly at the University of Kentucky, has joined the University of Mississippi faculty as professor and head of the Department of Secretarial Science.

John V. Machell recently joined the staff at Guilford College as associate professor of economics.

Donald J. May has become instructor in economics at the School of Business Administration, Emory University.

Fairy C. McBride is now assistant professor of secretarial science at Louisiana Polytechnic Institute.

Gaynell B. Miles has been appointed instructor in secretarial science at Southwestern Louisiana Institute.

Gladys Peck has joined the staff of Louisiana Polytechnic Institute as assistant professor of business administration and secretarial science.

Jay J. M. Scandrett has been appointed associate professor of business administration and economics at Southwestern Louisiana Institute.

Dolores M. Sandoz has been appointed assistant professor of accounting at Southwestern Louisiana Institute.

A. B. Segars has become associate professor of accounting at Southwestern Louisiana Institute.

Glenn R. Smith, director of research with the Farm Credit Administration at Columbia, S. C., is devoting part of his time to teaching a course in marketing at the University of South Carolina.

Harold Smolinski has become associate professor of accounting at Louisiana Polytechnic Institute.

Thomas Dixon Temple, formerly with the OPA and at one time associate professor of economics at Birmingham-Southern College, has joined the faculty of the School of Business Administration at the University of South Carolina.

George W. Tomlin has resumed his teaching at the University of South Carolina after three years of service with the OPA in Columbia.

J. Curt Victorius is now the senior member of the economics staff at Guilford College. He succeeds W. O. Suiter, who resigned to become acting director of the Tax Research Department of the state of North Carolina.

Rodney B. Wolfard has been appointed instructor in economics at Duke University.

The following names have been added to the membership of the Southern Economic Association:

C. E. Allred, College of Agriculture, University of Tennessee, Knoxville, Tenn.

W. W. Anderson, 8200 Cedar Street, Silver Spring, Md.

L. B. Bohanan, Department of Agricultural Economics, University of Maryland, College Park, Md.

W. Paul Brann, University of Arkansas, Fayetteville, Ark.

J. H. Cain, Louisiana Tax Commission, Box 4244, Capitol Station, Baton Rouge, La.

L. H. Carter, College of Commerce, University of Kentucky, Lexington, Ky.

E. B. Colmer, Box 396, State College, Miss.

C. Sudney Cottle, School of Business Administration, Emory University, Ga.

Harold A. Dulan, College of Business Administration, University of Arkansas, Fayetteville, Ark.

Roland B. Eutsler, Box 2275, University Station, Gainesville, Fla.

Paul T. Hendershot, Department of Economics, Louisiana Polytechnic Institute, Ruston, La.

Werner Hochwald, Box 208, Washington University, St. Louis, Mo.

Royal Mattice, Box 7, Hillsboro, N. C.

Michael O'Connor, Box 1293, Athens, Ga.

J. J. O'Leary, Box 5522, Duke Station, Durham, N. C.

L. S. Paine, Agricultural Economics Department, Texas A. and M. College. College Station, Texas

Lloyd Pierce, Box 93, University of Richmond, Richmond, Va.

P. K. Seidman, Farnsworth Building, Memphis, Tenn.

Robert S. Smith, Box 681, Duke Station, Durham, N. C.

George W. Stocking, Institute of Research and Training in the Social Sciences, Vanderbilt University, Nashville, Tenn.

Herman P. Thomas, University of Richmond, Richmond, Va.

W. T. Thompson, Box 304, Tuskegee Institute, Ala.

Theodore L. Whitesel, University of Arkansas, Fayetteville, Ark.

Samuel Wilcox, Box 1083, Florida State College for Women, Tallahassee, Fla.

NOTES

The seventeenth annual meeting of the Southern Economic Association will be held November 7–8, 1947, at the Henry Grady Hotel, Atlanta, Georgia.

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President Spengler has appointed the nominating committee for the 1948 officers of the Southern Economic Association. The committee is composed of Dr. G. W. Forster, North Carolina State College of the University of North Carolina (chairman), Albert Griffin, Emory University, and Ralph C. Hon, Southwestern at Memphis. All members of the Association who wish to suggest possible nominees to this committee are invited to do so not later than August 15.

James E. Ward, *Secretary-Treasurer*
Southern Economic Association

BOOKS RECEIVED

The Public Works Wage Rate and Some of Its Economic Effects. By Viola Wyckoff. New York: Columbia University Press, 1946. Pp. 313. $3.50.

Light Metals Monopoly. By Charlotte F. Muller. New York: Columbia University Press, 1946. Pp. 279. $3.00.

Business Budgeting and Control. By J. Brooks Heckert. New York: Ronald Press Co., 1946. Pp. ix, 546. $5.00.

The People Look at Radio. By Paul F. Lazarsfeld and Harry Field. Chapel Hill: University of North Carolina Press, 1946. Pp. ix, 158. $2.50.

Advanced Accounting. By E. I. Field and Lawrence W. Sherritt. New York: Ronald Press Co., 1946. Pp. vii, 490. $4.50.

The Relation Between Farm Management Factors, Milk Cost and Operator Labour Earnings. By P. H. Casselman. Ontario, Canada: New Era Publications, 1946. Pp. iii, 86. $1.00.

Regional Shifts in the Postwar Traffic of Class I Railways. 2 vols. Washington: Interstate Commerce Commission, Bureau of Transport Economics and Statistics, 1946. Pp. (Vol. I) xxxi, 261; (Vol. II) 149.

The International Financial and Banking Crisis, 1931–1933. By Paul A. Volpe. Washington: Catholic University of America Press, 1945. Pp. x, 123.

Industry and Society. Edited by William F. Whyte. New York: McGraw-Hill Book Co., 1946. Pp. vi, 211. $2.50.

Kentucky City Finances. By the Bureau of Business Research, James W. Martin, Director. Lexington: University of Kentucky and the Kentucky Municipal League, 1946. Pp. xii, 275.

Housing in Canada. By Economic Research Division of the Central Mortgage and Housing. Ottawa, Canada, 1946. Pp. 58. 25¢.

Monetary Theory. By George N. Halm. Philadelphia: Blakiston Co., 1946. Pp. xiv, 491. $3.50.

Religion in Economics. By John Rutherford Everett. New York: King's Crown Press, 1946. Pp. xiii, 160. $2.50.

Kansas Banking During the War Economy Period, 1939–1945. By L. J. Pritchard. Lawrence: University of Kansas Publications, 1946. Pp. 86.

The Social System of the Modern Factory. By W. Lloyd Warner and J. O. Low. New Haven: Yale University Press, 1947. Pp. xvi, 245. $3.00.

Principles of Marketing. By Harold H. Maynard and Theodore N. Beckman. 4th ed. New York: Ronald Press Co., 1946. Pp. xiv, 736. $5.00.

International Implications of Full Employment in Great Britain. By Allan G. B. Fisher. New York: Royal Institute of International Affairs, 1946. Pp. vii, 202. $3.50.

Guaranteed Annual Wages. By Jack Chernick and George C. Hellickson. Minneapolis: University of Minnesota Press, 1945. Pp. vii, 146. $2.50.

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Private Investment in a Controlled Economy: Germany, 1933–1939. By Samuel Lurie. New York: Columbia University Press, 1947. Pp. xvi, 243. $3.00.

Full Employment and Free Enterprise. By John H. G. Pierson. Washington: Public Affairs Press, 1947. Pp. vii, 183. Cloth, $3.00; paper, $2.50.

Certain Aspects of the Economic Development of the American Negro, 1865–1900. By Albert Lawrence De Mond. Washington: Catholic University of America Press, 1945. Pp. xii, 187.

Agenda for Progressive Taxation. By William Vickery. New York: Ronald Press Co., 1947. Pp. xi, 496. $4.75.

Development of Economic Society. By George Matthews Modlin and Frank Traver de Vyver. Rev. ed. Boston: D. C. Heath & Co., 1946. Pp. x, 474. $3.00.

Labor Force Definition and Measurement. Prepared by Louis J. Ducoff and Margaret Jarman Hagood for the Subcommittee on Labor Statistics of the Committee on Labor Market Research. New York: Social Science Research Council, 1947. Pp. x, 134. Paper, $1.00.

Business Finance and Banking. By Neil H. Jacoby and Raymond J. Saulnier. New York: National Bureau of Economic Research, 1947. Pp. xviii, 241. $3.50.

First Memorandum on the Central Economic Plan 1946 and National Budget 1947. The Hague: Central Planning Bureau of the Netherlands, 1946. Pp. 65.

Freedom and Reform. By Frank H. Knight. New York: Harper & Bros., 1947. Pp. vii, 409. $3.50.

Economics of Public Utilities. By Emery Troxel. New York: Rinehart & Co., 1947. Pp. xiv, 892. $5.75.

The American Individual Enterprise System: Its Nature, Evolution and Future. By the Economic Principles Commission of the National Association of Manufactures. 2 vols. New York: McGraw-Hill Book Co., 1946. Pp. xiii, v, 1119. Boxed, $10.00.

The Mechanics of Full Production and Full Employment: A Solution to Depressions. By Eugene Berkovits and George C. Atkins. New York: Wilcox & Follett Co., 1946. Pp. 71. $2.00.

Business Policies and Management. By William H. Newman. 2nd ed. Cincinnati: South-Western Publishing Co., 1947. Pp. viii, 824.

Wage Determination and the Economics of Liberalism. By E. Wight Bakke and others. Washington, D. C.: Chamber of Commerce of the United States, 1947. Pp. 105. Paper, $1.00.

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